

Arithmetic Guides and Matrices in the Holy Qura'an

| Amel Nashat Shakir | Northern Technical University/Kirkuk/ Technical Institute/ | | | | |
|----------------------|--|--|--|--|--|
| | Umayaa75@ntu.edu.iq | | | | |
| Nada S. Abdulmajeed | Northern Technical University/Kirkuk/ Technical Institute | | | | |
| | nst_architect@ntu.edu.iq | | | | |
| | Northern Technical University/Kirkuk/ Technical Institute/ | | | | |
| Dr. Ahmed Fatih Omer | sd_ahmed777@ntu.edu.iq | | | | |

The development of computers and its tools have led to the development of more specialized and in-depth research and studies in the Noble Qur'an and its sciences, especially those that research the scientific aspect of its miracles. The development, diversity and expansion of modern sciences, especially mathematics and engineering cause the sciences of the Holy Qur'an to expand in line with these sciences.

Each verse of the enlightening Qur'an spreads two sets of lights, the light of its guidance and the light of its miracles. Every group of people according to their degrees takes their fortune from any sign or scene from the scenes of the Qur'an. In this study, we noticed that the Noble Qur'an mentioned accounting and geometry and its divisions, including numbers, digits and matrices, the importance of numbers and digits and its dealings with modern mathematics. We find that modern mathematics is currently based on the digit in its complete and special form, and not on numbers. Thus, we find in our studies rational numbers which are fractions. There are also irrational numbers which are very complex in form in addition to Catrinian numbers etc. Because of the importance of the matrix, we believe that the Qur'an refers to it through a group of Qur'anic references, the most important of which was the mention of the word "masfuf" which can be translated into matrix in two generous verses. It is particularly mentioned in the two great surahs with names bearing the meaning of the row (As-Saaffat and As-Saff). It is considered a major basis in many branches of science and research, especially mathematics and modern sciences, such as computer and its applications. It depends on it in its design principle and in its work in programming and programs. The matrix is considered the basic structure for the data in the most important scientific engineering programming for research and development until now which is Matlab program.

It appears through the study that the contents of the Noble Qur'an of words, letters and numbers can be described in the form of various matrices, and since the verses of the Noble Qur'an are written and lined up in rows, the line matrix is the appropriate form to deal with the contents of the Holy Qur'an, whether literal or numerical. Thus, it is possible to perform several mathematical and logical operations on them. The Qur'anic reference to matrices is a precursor to the Qur'an and a scientific miracle that is added to the miraculous balance of this glorious book. The line matrix or the line ray can be considered the basic mathematical structure of the Qur'anic data, especially the numerical data.

Keywords:

Numbers and digits in the Holy Qur'an, basic Qur'an numerical data, scientific miracles of mathematics in the Holy Qur'an, matrices in the Holy Qur'an.

The importance of the research and its justifications

The Holy Qur'an has preceded others in referring to some scientific facts and cosmic sciences. With the development, diversification and expansion of the sciences of the age, the sciences of the Noble Qur'an expand in line with these sciences, and one of the most important mathematical foundations of these sciences is the science of numbers and digits in the Holy Qur'an and matrix science.

Here, digits are not numbers, but are a symbolic form of the number, and scholars have shown that numbers are finite, starting with the number 0 ending with the number 9. However, numbers are endless, so that they begin and do not end, as there is no number that is the largest of them, as there are always more numbers, thus they made it clear that the digit 9, for example, consists of a single digit, which is 9. Number twenty-nine consists of two digits, the first 9 and the second 2 (Ali, 2010). When we perform arithmetic operations, we do not say the digit (29), rather we say the number (29). This refers specifically to what the number 29 symbolizes, and there is an expression referring to the digits of the number 291 whose sum is equal to 12. This is the sums of these numbers that form in symbolic terms of the digits of the number 291, which equal 2 + 9 + 1 = 12. It has been found that our expression allows it to be transposed in order for facilitation. According to this, numbers in general refer specifically to a specific number of numbers. Because of the importance of the matrix as a structure of data organizing elements referred to by the Holy Qur'an, we as specialists try to show the Qur'anic reference and evidence for this science.

The development of the computer and its tools has led to the development of more specialized and in-depth research and studies in the Noble Qur'an and its sciences, especially those that examine the scientific aspect of its miracles. This is because the Holy Qur'an is a super-

organized, meticulous, well-ordered building with a grand degree, when dealing with its data and contents. It is also an ordered structure with scientific and mathematical foundations, that help to show the masterpieces of the arrangement and the Our'an arrangement of everything it contains. The Noble Qur'an is similar to the matrix in that its elements are organized in order, and its elements are carefully and accurately described.

The study shows the importance of adopting matrixes as a data structure when dealing with the contents of the Holy Qur'an, in particular the digital data and the Qur'an number. Mathematical and logical operations can be performed on them, also facts secrets and miracles can be obtained. Researching and the diversity of methods applied show that it is necessary to consolidate the research of the next stage, clarify its fundamentals, and achieve a scientific and methodical transformation in dealing with the literal and numerical contents of the Holy Qur'an.

2- Introduction

God Almighty described the lined universe and created its creatures and assets like The Book Inscribed, in the form of lined lines, and swore by this book, by saying and The Book Inscribed, swearing by its contents by saying and The Book Inscribed, to draw our attention to the reality of the great universe and to make us scrutinize its lines, and contemplate its rows, from atoms to galaxies. So, we find that it forms a large, arranged matrix, organized by the master of the heavens and the earth, so that it contains smaller arrays. Thus, we say what is the greatest organizer of these rows and what is the wisest of it.

Everything in the universe is ordered and arranged with wisdom, knowledge and destiny, including the words of God Almighty, the

Glorious Qur'an, as it is considered an organized matrix arranged precisely and tightly. Its surah, verse, word, letter and number are well arranged that this arrangement cannot be violated or tampered with, because that will lose its meaning and purpose.

3-Number and arithmetic in the Holy Quran

One of the most wonderful depths of the scientific miracles in the Noble Qur'an is a depth related to the number and arithmetic. Here arithmetic is the science of known arithmetic, and this is one of the depths of the scientific miracles in the Book of God Almighty, and we do not attach importance to abstract numbers as mentioned in the book similar to some people's mistaken thinking about the number 19, for example! This is because that only takes us away from the right path, and needs sound scientific evidence.

** The mentioned numbers:

In the holly Quran, there are many numbers mention. In this section, these numbers are mentioned in their original texts whose translations are taken from Abdullah Yusuf Ali at http://search-the-quran.com/ (2010). The numbers mentioned in the Noble Qur'an in different situations for different purposes are:

The fractions are: half - a third - two-thirds - a quarter - a fifth - a sixth - an eighth - a tenth as in the following example. The frequencies of these numbers are not equal because they are mentioned in different situations as Allah said:

1- "He is Allah, the One and Only"

112: 1

2- "when the Unbelievers drove him out: he had no more than one companion; they two were in the cave"

9:40

3- 4-5-6- "here is not a secret consultation between three, but He makes the fourth among them, - Nor between five but He makes the sixth"

58: 7

7-8- "He made it rage against them seven nights and eight days in succession"

69: 7

9-300- "So they stayed in their Cave three hundred years, and (some) add nine (more)" 18:25

10-"He that doeth good shall have ten times as much to his credit"

6:160

11- "O my father! I did see eleven stars and the sun and the moon"

12:4

12- "We divided them into twelve tribes or nations"

7:160

19- "Darkening and changing the colour of man! * Over it are Nineteen".

74: 29, 30

20-200- "If there are twenty amongst you, patient and persevering, they will vanquish two hundred" 8: 65 30- "The carrying of the (child) to his weaning is (a period of) thirty months".

46: 15

40- "And remember We appointed forty nights for Moses" 1:

51

50-1000- "and he tarried among them a thousand years less fifty"

29: 14

60- "And if any has not (the wherewithal), he should fast for two months consecutively" 58: 4

70- "if thou ask seventy times for their forgiveness, Allah will not forgive them"

9: 80

99- "This man is my brother: He has nine and ninety ewes"

38: 23

100- "but Allah caused him to die for a hundred years"1:

259

1000-2000- "if there are a hundred of you, patient and persevering, they will vanquish two hundred" 8: 66

3000-"Is it not enough for you that Allah should help you with three thousand angels (Specially) sent down"

5000- "your Lord would help you with five thousand angels Making a terrific onslaught" 3: 125

50000- "The angels and the spirit ascend unto him in a Day the measure whereof is (as) fifty thousand years"

100000- "And We sent him (on a mission) to a hundred thousand (men) or more" 37: 147 Half, one-third, two thirds- "Thy Lord doth know that thou standest forth (to prayer) nigh two-thirds of the night"

Quarter- "but if they leave a child, ye get a fourth" 4: 12

A fifth- "And know that out of all the booty that ye may acquire (in war), a fifth share is assigned to Allah"

8:41

A sixth – "if the deceased Left brothers (or sisters) the mother has a sixth" 4: 11

An eighth- "if ye leave no child; but if ye leave a child, they get an eighth" 4: 12

A tenth-

"And their predecessors rejected (the Truth); these have not received a tenth of what We had granted to those"

It is easy to note that the Noble Qura'an uses number ten and its doubles, also the digit 10 appears in many verses as in:

"By the break of Day* By the Nights twice five"

"but if thou complete ten years, it will be (grace) from thee " 28: 27

"Making ten days in all"

2:196

4- Numerical Miracle in the Noble Qura'an When looking at the term (numerical miracle), we find that it consists of two parts: the miracle and the number.

The miraculous matter:

The miraculous matter is the thing that cannot be achieved and impossible. In the dictionary, a miracle is what the opponent failed to do when challenging.

Counting and numbering: Statistics,

3

Here, we mean the known numbers that are used for counting.

Thus, it appears that the term numerical miracle means, according to the discussion of the previous studies, it becomes clear to me it is (What was mentioned in the Noble Qur'an referred to universal truths by numerical calculation).

Through this, it becomes clear that the term numerical miracle consists of two main points:

The first is that it is a miracle that humans are not able to come up with.

The second is miraculous matter dependent on numbers and digits.

Understanding these two points in the term (numerical miracle) is essential. To correctly call that type of studies a kind of statement of what the Noble Qur'an contains of numerical miracles, these two pillars must be met:

The first: it is a miracle.

The second: it depends on the language of numbers and digits.

Thus, the great defect appears in many studies related to this type of miracle. For example, the mention of equality between men and women in the Noble Qur'an, between the world and the Hereafter and between the angels and demons. These are matters mentioned by those who wrote about the numerical miracle citing the numerical miracle in the Holy Quran

5- A row is an attribute of the things of Heaven, the angels, and loved ones of God Almighty

Row in language is a straight, straight line of everything known and grouped together as rows (Ibn Manzur, 1414 AH).

When searching in the Noble Qur'an for words that carry the meaning of arrangement, organization, stacking, coordination, alignment, or good organization, it has been observed that the All-Knowing Wise, Almighty, chose the word {row} and the word {matrix} to express all these meanings, as He described the word {row}. He who loves the illusion of His fighters for His cause, and His angels, and swears by the attributes of a row, and chooses to describe the things of Heaven, the word "array."

6- The matrix

The matrix is a data structure that contains ordered elements that can belong to different classes, and may be of different dimensions, used to facilitate the understanding of many ideas and scientific, engineering and economic phenomena and to reach solutions to them, by converting these ideas into mathematical formulation.

The concept of matrix and its many wider applications enter into many researches and problems, as it is considered a main basis in research whose solution requires large data and mathematical operations.

It is possible to take advantage of its shape by placing data in a simple and easy way, through which the required results can be obtained quickly. In addition, there is no doubt that the matrix plays a prominent role in creating arithmetic operations by using it on the computer, and most modern sciences from information theory to computer science and communication. Their branches, artificial intelligence, divisions, and the sciences of image, sound, video, space etc., in large part, depend on matrices.

7- Definition of matrix

Matrix is a set of data arranged in rows and columns, symbolized by A (m, n), and its elements are denoted by subscripts such as a_{mn} , with shapes inspired by the number of columns or the number of lines, such as a rectangular matrix. The number of its elements is $m \times n$, and the square and the number of its elements is n^2 and is of degree n. It could be according to the elements it contains, such as zeros and monos, and the general form of the matrix is:

$$a_{1n}$$
 a_{12} a_{11} a_{2n} a_{22} a_{21} $A_{(m,n)} = n$ is the number of columns and m is the number of lines.

In the square matrix, we call the line connecting the two elements a_{11} and a_{n} n the principal diameter, and its elements with the main diagonal elements, and the sum of these elements is defined by the main matrix effect. The line connecting the elements a_n1 and a_n1 with the secondary diameter, and its elements are called the elements of the secondary diameter. The sum of these elements is defined by the effect of the secondary matrix. We can call each line in the matrix the ray of a line, the components of which are the same as the components of the line.

Line matrix (line ray)

It is a group of organized elements in the form of a line. It can be considered as a matrix A(m,n) in the following form:

$$A_{(1,n)} = [a_{11} a_{12} a_{13} ... a_{1n}]$$
 or $A = [a_1 a_2 a_n]$

An example on line matrix (line ray) on the numerical matrix $X = \begin{bmatrix} 1 & 2 & 3 & 4 \end{bmatrix}$.

8- Features of matrixes

Matrices are characterized by ordered data structure that can be easily and flexibly dealt with. They are also characterized by being operable as a structure. Each individual element can be operated on.

Each element is distinguished by its site, and therefore any of its elements can be easily accessed.

It is used in many engineering applications to solve complex problems.

Modern software is distinguished by the presence of cell arrays, which is a matrix of elements of different size and type that includes each cell a type of data that may be literal or numerical arrays, simple objects or other cell arrays. For example, a cell may contain from the cell matrix a verbatim matrix. The other cell contains a normal numerical matrix, while the third cell contains a nodal numerical matrix.

9- The most important operations on matrices

The following operations can be performed on matrices:

- ② Basic mathematical operations such as addition, subtraction, multiplication and division, in addition to raising to strength.
- ② Operations on specific lines or columns, such as combining specific line or column elements.
- ② Other operations such as finding the order of the matrix, the transposed, and the reciprocal.
- Searching for an item, finding its location, and arranging and sorting items.
- ② Logical operations, depending on the nature of the elements of the matrix.
- ② Calculation and probability operations on matrix elements.

Finding a matrix determinant, which is a numerical value that can be arrived at through a specific method related to the order of the determinant.

Reshape an array by resetting its dimensions.

10- The reference to matrices in the Noble Oura'an

Mathematics is the nucleus of most sciences, and the Noble Qur'an mentioned various topics

related to the branches of this science, including matrices.

It is the basis of most mathematical and engineering sciences, especially the branches of artificial intelligence on which computer and communication technologies depend.

It facilitates and simplifies processing data, and each element in it has a unique position, and each element can be dealt with individually, and because of its importance, the Holy Qur'an referred to it with different references in many verses and these references are:

- 1- The first Qura'anic reference. This reference is implicit as the Noble Qura'an is large organized matrix containing many partial matrices which made the defeated human abilities with its accurate controlled verses whose order is great, their words are beautifully coordinated, and their letters and numbers are formulated. It attests to the delicacy of the arrangement, the magnificence of its organization, and the great divine classification of his book.
- 2- The word matrix is mentioned twice in the Noble Qura'an in two Holly verses describing sample of things from Heaven as Allah said:

"They will recline (with ease) on Thrones (of dignity) arranged in ranks; and We shall join them to Companions, with beautiful big and lustrous eyes".

52: 20

And cushions set in rows

88: 15

From the interpretation of the word "matrix, that is, placed one by one, flat as if the lines are in the best order".

Ibn Manzur (1414). There is also a "leaning in it on beds placed in regular rows and on flat lines" (Tantawi, p.3986).

3- He singled out two great surahs that emphasize the line, the chanting, the arrangement and the organization in all His creation and creatures, and in matters of his obedience in the first Surah, Surah As-Saaffat.

In the first verse of this Surah, Allah swore by Surah As-Saaffat, and the Almighty said: By those who range themselves in ranks

37:1

They are groups of angels, worshipers, or Mujahideen, who complete themselves by lining up in obedience and prayer. However, lined rows (Saaffa) are similar the rows of worshipers in prayer. The second surah is Surat As-Saff, in which Allah mentioned His love for those who lined themselves or are lined like a building that has stacked some of it together.

4- As we said before that recitation is typesetting, coordination and good order, and God Almighty wanted to show us the importance of reciting things

He described it, and that it is one of the great things, so God, may He be glorified and exalted be He, affirmed and dedicated: And we are verily ranged in ranks (for service)

37:165

It is one of the greatest signs in which there is an affirmation and a challenge by mentioning and we are verily ranged in ranks (for service)

37:165

It is the of the greatest references to which contains challenge and emphasis by saying we are verily ranged in ranks

Here, the angels say that we are half ourselves or our feet in prayer, or in performing obedience and service, or around the throne, or in the air we wait for the divine command, or in the sea calling for the believers, or in all of these.

Also, we say that God Almighty emphasized order and organization of the order of the universe, and that He was the one who described the items of his universe and all of it.

He created it in the best formation and most beautiful order, arrangement and alignment.

5- The word matrix (which could mean rank) is mentioned 7 times in the Noble Qur'an, in addition to that the two words "As-Saffon, As-Saffaat, which could both means in ranks, are composed of 7 letters.

The number that pertains to a divine secret, and upon which the structure of the universe and the digital system is based in the Noble Qur'an, and it is one of the basic numerical data

in the miracle of the Noble Qur'an (Homsi; Abdul-Daem) and therefore this compatibility is considered one of the nice things of the Holy Our'an.

6- The word "matrix" is mentioned in many verses, and its interpretation states that the row is in straight rows, like the rows of worshipers in prayer, which resembles the rows of the array, we mention it in its order. The Almighty said:

"And they will be marshalled before thy Lord in ranks, (with the announcement), "Now have ye come to Us (bare) as We created you first: aye, ye thought We shall not fulfil the appointment made to you to meet"

18: 48

Therefore, concert your plan, and then assemble in (serried) ranks: He wins (all along) today who gains the upper hand

20:64

"Seest thou not that it is Allah Whose praises all beings in the heavens and on earth do celebrate, and the birds (of the air) with wings outspread? Each one knows its own (mode of) prayer and praise. And Allah knows well all that they do".

24: 41

By those who range themselves in ranks

37:

1

Truly Allah loves those who fight in His Cause in battle array, as if they were a solid cemented structure.

61:4

"Do they not observe the birds above them, spreading their wings and folding them in? None can uphold them except (Allah) Most Gracious"

67:19

(From) the Lord of the heavens and the earth, and all between, (Allah) Most Gracious: None shall have power to argue with Him.

78:37

And thy Lord cometh, and His angels, rank upon rank 89:

Here, the word 'rank' according to all scientists is a row that includes items lined one besides the other (8- Ibn Abbas, 1992).

The Holly Qura'an is described as By a Decree inscribed 52: 2

The word {inscribed} means "coherent" writing in lined lines of arranged letters that combine words with agreement (Al-Bukai, 1418 AH).

The book is written in aggregation means the written in lines that are different. There is a dispute on which book it is and some say it is the Noble Qur'an (Al-Thaalabi,2002).

Also, we find in the hadith of the Messenger of God, may God bless him and grant him peace, a mention of the rows and ranks and the exhortation for organization and arrangement in all matters.

Jabir bin Samra, may God be pleased with him, said the Messenger of God, may God bless him and grant him peace: "Are you not lined up as the angels line up with their Lord?" We said: How

the angels line up with their Lord? R said: "They complete the advanced rows and close together in line" [Muslim, 1994, P. 421).

11- Miracles of the Qura'an in the reference to the matrices

Each verse of the enlightening Qur'an spreads two sets of lights, the light of its guidance and the light of its miracles, and every group of people according to their degrees takes their fortune from any sign or scene from the scenes of the Holy Qur'an, in this study we are lucky that we were guided that the Holy Qur'an mentioned arithmetic and geometry and its divisions including Matrices, and due to the importance of matrices, which are considered a major basis in many branches of science and research, especially modern mathematical sciences, and one of the foundations of modern technical sciences, such as computer science and its applications, as it depends on it in its design work and programming and programs.

Because of the importance of the matrix, we believe that the Noble Qur'an referred to it through a group of Qur'anic references, the most important of which was the word "matrix" twice mentioned in two verses, and two great surahs were singled out with names bearing the meaning of the row (as-Saffat).

11- examples of matrices in the Noble Qura'an

Here are some examples of the types of matrices that can be formed from verses of the Holy Qur'an:

-A literal matrix: its elements are words of a Quranic text or a verse, and for example the matrix of words of a verse.

In the name of Allah, Most Gracious, Most Merciful. 1: 1

In the name of Allah, Most Gracious, Most Merciful. =A 1: 1

_In the name of Allah, Most Gracious, Most
Merciful]=A

A literal matrix: its elements are letters of words of a Quranic text or a verse, and for example the matrix of the letters of the words of the Surah the One and Only whose letters in the native text are [a, l, l, h. a, s, m, d]=A

112: 1

- A numerical matrix: the elements of this matrix are the number of verse repetitions, word or letter in the text of the Qur'an. For example, the matrix of the number of times the names of God ("God, the Most Gracious, the Most Merciful") are repeated in Surat Al-Fatiha, where each of them is repeated twice.

$$[222] = A$$

- A numerical matrix, the elements of which are the number of words of a Quranic text or a verse, for example the matrix for the number of words of the seven verses of Surat Al-Fatiha [1: 1].

$$[(10)_7 (3)_6 (5)_5 (3)_4 (2)_3 (4)_2 (4)_1] = A$$

- A numerical matrix, the elements of which are the number of words of a Quranic text or a verse, for example the matrix for the number of words of the seven verses of Surat Al-Fatiha "In the name of Allah, Most Gracious, Most Merciful" [1: 1/1].

[6 6 4 3<u>]</u>=A

-A numerical array whose elements are the number of letters in the words of a group of verses that have the same number of words. They may be successive in one surah, and they may be in different Surahs. For example, the two arrays B.C.

By the Sun and his (glorious) splendour

$$B = \begin{pmatrix} 1 & 5 & 1 & 5 \\ 5 & 3 & 5 & 1 \\ 3 & 6 & 1 & 5 \\ 4 & 6 & 3 & 4 \end{pmatrix}$$

By the Moon as she follows him

By the Day as it shows up (the Sun's) glory By the Night as it conceals it 91:1

"Master of the Day of Judgment" 1: 4

Verily, verily, your Allah is one 85: 4 C= $\begin{pmatrix} 3 & 3 & 5 \\ 4 & 5 & 2 \\ 6 & 5 & 2 \end{pmatrix}$

-A numerical matrix (a matrix of cells containing words and numbers), the elements of which are words of a Quranic text or a verse and the number of letters of its words, and for example the matrix D where its elements are the words of a verse and the sum of the letters of its words:

"O my Lord! make me one who establishes regular Prayer, and also (raise such) among my offspring O our Lord! and accept Thou my Prayer".

Ibrahim:

Verse 40

rabi ajealni muqim alsuluh w min dhuriyati rabana w tuqbal duea'an

Note:

- 1- When counting the letters and words of the Noble Qur'an, we adhere to the method of counting and statistics, depending on the drawing not the pronunciation according to the first or Ottoman drawing of the Hafs's narration of Asim (which is the method used by researchers when counting the letters and words of the Holy Qur'an), and by considering the letter Waw as a word (some researchers combine the letter Waw with the subsequent word), using the vowel coding program for the Holy Qur'an (Khaled, 2019). This method adopts the electronic Qur'an of the King Fahd Complex to print The Holy Medina. Quran in www.qurancomplex.org, which uses the same data as the Holy Quran Statistics Program (Abdul-Daem, 2019).
- 2- As long as the Noble Qur'an is a timeless miracle, it has many aspects of miracles with every narration and every drawing of the Noble Qur'an contains them without exception with the same level of accuracy and perfection, but the first (Ottoman) drawing is an arresting drawing written in its form for the secrets of God Almighty singling out his dear book without the rest of the heavenly books, so scholars stress not to deviate from the Ottoman drawing, as Al-Suyuti stated in perfection of Imam Ahmad. He said: It is forbidden to

contradict the Qur'an of the Imam in Waw, J. A, etc (Abdul-Rahman, 1974).

12- MATLAB (MATRIX LABORATORY)

Matlab is a computer program called the Matrix Lab Program, which is an advanced application tool that is distinguished by the fact that the element in which data is stored is the matrix, as we do not need to give any dimensions to this matrix. It is a high-level matrix language, and it is the most popular program in the scientific community.

Matlab is one of the most important programs that provide a high-level software environment used to solve scientific, technical, industrial, economic and engineering problems, regardless of their complexity. In addition, it is a simulating and modeling environment for different engineering systems to model any issue or phenomenon, and analyze it in the simplest, most recent and easiest way to program. Also, it can perform mathematical and logical calculations on all types of numerical groups and systems, and developing a complete, wide and complex set of different programs and applications because it has the ability to deal with other programming languages and other programs, as it contains Graphical User Interface.

The Matlab program has become the most basic component of engineering, scientific academic study, scientific research and industrial development,

It was adopted as a basic material for building the engineering and sound programmatic thinking of the engineer in many universities worldwide, and it is indispensable for any student, researcher or engineer, as it was provided with a large amount of tools and tool boxes. It is also has a huge library of readymade mathematical functions that help various scientific and engineering specializations, from which the following can be implemented (Abdul Karim).

12-1 Some MATLAB features

•It has many ways to deal with matrices and the most powerful methods of insertion and expansion, and rearranging some parts of the matrix in one and two dimensions and the operations that take place on it.

Supports n-D arrays.

•Its real strength lies in the ability to deal with numbers and texts.

It handles symbolic strings, which are special numerical arrays of ASCII values (American Standard Code for Information Interchange) that can be dealt with all tools for dealing with matrices, as numerical data can be extracted from symbolic strings, and numerical results can be converted into symbolic strings.

12-2 MATLAB and the content of the Noble Qura'an

The Matlab program can be used with the literal and digital contents of the Holy Qur'an to take advantage of its characteristics showing meanings, grace and benefits, and revealing the secrets, truths and miracles that it carries. It is the best environment to deal with the digital data of the Qur'an text performing operations on it.

Example:

In the name of Allah, Most Gracious, Most Merciful. 1:1

The verse words are inserted as a matrix whose elements are words through generating a string of literal data. It is sufficient to write the name of the variable, followed by the equalization signal and literal string between the two quotation marks as follows:

Thus, we perform several functions and we can get the number of letters and dual code for each word. We find

_ASCII((American Standard Code for Information Interchange) as follows:

| | >> b = double | (a) | | | | | | | | | | |
|----|-----------------------|------------|------|------|------|------|------|------|------|------|--|--|
| | ъ = | | | | | | | | | | | |
| Т | Columns 1 through 10 | | | | | | | | | | | |
| | 32 | 1576 | 1587 | 1605 | 32 | 32 | 32 | 32 | 1575 | 1604 | | |
| | Columns 21 through 20 | | | | | | | | | | | |
| | 1604 | 1607 | 32 | 32 | 32 | 1575 | 1604 | 1585 | 1581 | 1605 | | |
| | Columns 21 through 30 | | | | | | | | | | | |
| | 1606 | 32 | 32 | 32 | 1575 | 1604 | 1585 | 1501 | 1610 | 1605 | | |
| | Columns 31 | through 32 | | | | | | | | | | |
| | 32 | 32 | | | | | | | | | | |
| fx | >> | | | | | | | | | | | |

13- Results and discussions

The Creator, may He be glorified and exalted, has organized the universe with all its minutes, things and atoms wonderfully at the best of singing, organization, arrangement and description. It is made as a miracle for minds and hearts, and those with them and their inventors and tools to come up with a surah like him.

The research seeks to form a set of methodological scientific foundations and rules that are a reference for research and studies with science and mathematics with the literal and digital contents of the Holy Qur'an, that help to control and control these contents. It is the center for researchers in their numerical and statistical studies, and in honor of the Holy Qur'an so that work on it and with it is organized and documented with scientific and faith evidence, for everyone who likes to verify the validity of these studies so that the heart may be reassuring, and we build our belief on solid and solid foundations.

From the above, the followings have been found:

- The All-Knowing, Almighty God chose the word "row" and the word "matrix" to express the meanings of arrangement, organization, coordination, typesetting, alignment, and good order.
- Describing the one He loves those fighting for Him, and His angels, with the word "row", and swears by the adjectives a row, and he chose to

- describe things from heaven the word "matrix."
- ➤ The Noble Qur'an referred to matrices through a group of Qur'anic signs, the most important of which was the word "matrix" secondly, in two generous verses, two great surahs with names that carry the meaning of the row are signaled out (As-Saff and As-Saffat).
- Imam Al-Razi (Muhammad ibn Omar ibn al-Hasan ibn al-Husayn al-Taymi al-Razi, nicknamed Fakhr al-Din al-Razi, Khatib al-Ray (T: 606 AH)), said on al-Bagarah: "Whoever Surat contemplates the nice aspects that compose this surah and in the basics of its arrangement discovers that the Holy Qur'an is also miraculous according to its eloquence. The words and the honor of the meanings are also because of its arrangement and the organization of the verses. Perhaps those who said that it was miraculous because of the style mostly detached from this kind, not paying attention to these secrets" (Suyuti,1974, P. 289) The contents of the Holly Qura'an is organized as virous matrices.
- ➤ Since the verses of the Noble Qur'an are written and lined up in rows, and the verse is a group that is arranged, lined, and tightly tuned in the form of a line row, the line matrix is the appropriate form to deal with the contents of the Holy Qur'an, whether they are literal or numerical.

- The line matrix, or the line ray, can be considered the basic mathematical structure of the Qur'anic data, especially the digital data.
- lacing digital data in the Qur'an text in a matrix may be more useful when dealing with them, especially in the research of numerical scientific miracles.
- ➤ We can form from each verse several lined-literal and numerical arrays.
- ➤ A number of mathematical and logical operations can be accomplished and applied to matrices that were formed from the contents of the Holy Quran.

14- Recommendation and conclusions

It appears through the study that the Noble Qur'an referred to one of the most important foundations of modern mathematical sciences, on which the computer relies in its design and work in programming and programs, which are matrices, which also use numbers and digits as part of the research. This is a Quranic scientific precedent. It is added to the scientific miracle balance of the Holy Quran.

We hope that this topic is important in the research studies that examine the relationship between the computer and the Holy Qur'an, and the scientific and numerical miracles in the Holy Qur'an, in which we believe that most Qur'anic studies will be in the coming years. Thus, we put the foundations for the next stage of research in miracles of the book of God Almighty, as well as contributing to the efforts that are aimed at serving the Noble Qur'an and linking it to mathematical and engineering sciences.

15- References

- 1. Ali, A., Y. (2010). *Quran*. http://search-the-quran.com/. Accessed at 10/1/2019. The secrets of letters and numbers ", www.quran.imamali.net,
- 2. Ibn Manzur, J. (1414). *Lisan al-Arab, Bab Saffaf*, Part 9.

- 3. Al-Bukai, B., A. (1418AH). *Organized* pearls in proportion to verses and suras. Beirut: Dar Al-Kutub Al-Ilmiyya.
- 4. Tantawi, S. *Al-Tafsir al-Waseet*. Cairo: Nahdet Egypt Publishing House.
- 5. Abdul-Daem, K. The Number Seven in the Holy Quran Ishraqat, the first edition of the Dubai Award for the Holy Quran.
- 6. Homsi, M., A. extrapolation study of No. 7.
- Ibn Abbas, A. (1992). Tanweer al-Muqbas from Ibn Abbas's Tafsir (comp. Majd al-Din al-Fayrouzabadi). Beirut: Dar al-Kutub al-Ilmiyya.
- 8. Al-Bukai, B., A. (1418AH). Organized pearls in proportion to verses and suras. Beirut: Dar Al-Kutub Al-Ilmiyya.
- 9. Al-Thaalabi, A. (2002). *Al-Jawaher Al-Hassan in Interpretation of the Qur'an*. Beirut: House of Revival of the Arab Heritage.
- 10. Muslim, M., I. (1994). Sahih Muslim, Verification by Muhammad Fuad Abd Al-Baqi. Cairo: Dar Al-Hadith.
- 11. Khaled B. (2018). *The vesical code program for the Holy Quran*. http://www.BinaryQuranCode.blogspot.com.tr. Accessed at 8/8/2019.
- 12. Abdul-Daem, K. *The Holy Quran Statistics Program according to the first diagram*, version 3.5. http://www.kaheel7.com/ar/. Accessed at 9/10/2019.
- 13. Abdul-Rahman, A. (1974). *Perfection in the Sciences of the Qur'an* (Muhammad A, invest). Cairo: The General Egyptian Book Authority.

14. Abdul Karim A. *Reference and educational guide MATLAB 6.5*. Aleppo: Dar Shuaa Publishing.

15. Suyuti. (1974). Perfection in the Sciences of the Qur'an, 2/289.