Lesson-10: Introduction to QBasic

A. Fill in the blanks:
   1. The value which does not change during the execution of the program is called constant.
   2. A character set is a set of symbols which are used in a programming language.
   3. The hierarchy in which the operators are executed in Basic expression is called BEDMAS.
   4. Numeric constants contain only numeric value.
   5. String constants must be enclosed within double quotes.

B. State true or false:
   1. A string variable is represented by an alphabet followed by dollar ($) sign. TRUE
   2. Variables are of three types. FALSE
   3. Constants are memory locations to store data in it. FALSE
   4. Numeric constants include all the positive and negative numbers. TRUE
   5. The variable name must begin with a number. FALSE
   6. X= 1.3 is a valid statement. TRUE
   7. 22.4, 43.6 are examples of whole numbers. FALSE
   8. Addition and subtraction operations come first in basic hierarchy. FALSE

C. Applications based questions:
   1. Mansi wants to write a program to compare two values which are not equal. Suggest to her the operator which displays the non-equality between two operands.

Ans. <>

2. Ritika has written a program in QBasic. She wants to run the program using the shortcut key. Suggest the shortcut key to run a program.
   Ans. F5

D. Multiple choice questions:
   1. _____ sign is added at the end of a string variable.
      Ans $
   2. Which is the correct numeric expression?
      Ans A2=21
   3. _____ key is used to switch from one mode to other in QBasic.
      Ans F6
   4. The extension of a QBasic program file is _____.
      Ans .bas
   5. To hide the welcome dialog box, press _____ key.
      Ans Esc

E. Answer the following in one word or one sentence:
   1. What is the full form of BASIC?
      Ans. Beginners Allpurpose Symbolic Instructions Code.
   2. What are the different types of constants?
      Ans. Numeric constants and Alphanumeric or string constants.

3. Give two examples of numeric and alphanumeric constants.
   Ans. Examples of numeric constants are -224, +45. Examples of alphanumeric constants are - “192”, “Raghav”.
4. Which operator is used to represent ‘less than equal to’ condition in Basic?
   Ans. <=
5. Which statement is used to display output on the screen?
   Ans. PRINT
6. What are the types of operators in QBasic?
   Ans. Arithmetic, Relational and Logical
7. Who developed BASIC?
   Ans. John G. Kemeny and Thomas E. Kurtz

F. Answer the following:
1. Define Basic language.
   Ans. Basic is a programming language used for beginners. It is very easy and simple to understand. BASIC stands for Beginners Allpurpose Symbolic Instructions Code. It was developed in Dartmouth College, New Hampshire, USA by Professor John G. Kemeny and Thomas E. Kurtz in May 1964.
2. Write different ways to run a QBasic program.
   Ans. There are many ways to run a program in QBasic which are as follows:
   1) By pressing F5 key
   2) By selecting RUN menu and clicking on start option.

3) By typing RUN in the immediate mode and pressing the ENTER key.

3. Define variables. Name the types of variables.
   Ans. A variable is a location in memory to which any value can be assigned. It continues to hold the value until another value is assigned to it. There are two types of variables:
   Numeric variable and alphanumeric or string variable.
4. Differentiate numeric and alpha numeric constant.
   Ans. Any numeric value, an integer or a real number, positive or negative is called a numeric constant. For example: +224, +12, 0, -7.4 are valid numeric constants.
   Anything enclosed in double quotes is alphanumeric constant. For example, “RAGHAV”, “SUM=Rs.84”, “192” are a few valid alphanumeric constants.

5. Define the term hierarchy of operations. Write The hierarchical order of the arithmetic operators in QBasic.
   Ans. Hierarchy defines the order in which the operators are executed in basic expression. We use BEDMAS for the hierarchy of operation. The full form of BEDMAS is:

B	Brackets	()
E	Exponentiation	^
D	Division	\
M	Multiplication	*
A	Addition	+
S	Subtraction	-

ACTIVITY SECTION

Write QBasic programs for the following:

(i) To display a message “WISH YOU A GOOD DAY”.

Ans.

QB64 x64

File Edit View Search Run Options Tools

```
1 Rem To display a message "WISH YOU A GOOD DAY"
2 Cls
3 Print "WISH YOU A GOOD DAY"
4 End
5
```

Untitled

```
WISH YOU A GOOD DAY
```

(ii) To print the entrance form with the titles as: Name, Age, Father’s name, Occupation, Address and Contact number.

Ans.

QB64 x64

File Edit View Search Run Options Tools

```
1  Rem To print the BIODATA
2  Cls
3  Print
4  Print Tab(15); "ENTRANCE FORM"
5  Print
6  Print Tab(5); "NAME"; Tab(20); ":"; Tab(25); "_________"
7  Print Tab(5); "AGE"; Tab(20); ":"; Tab(25); "_________"
8  Print Tab(5); "FATHER'S NAME"; Tab(20); ":"; Tab(25); "_________"
9  Print Tab(5); "ADDRESS"; Tab(20); ":"; Tab(25); "_________"
10 Print Tab(5); "CONTACT NUMBER"; Tab(20); ":"; Tab(25); "_________"
11 End
12
```

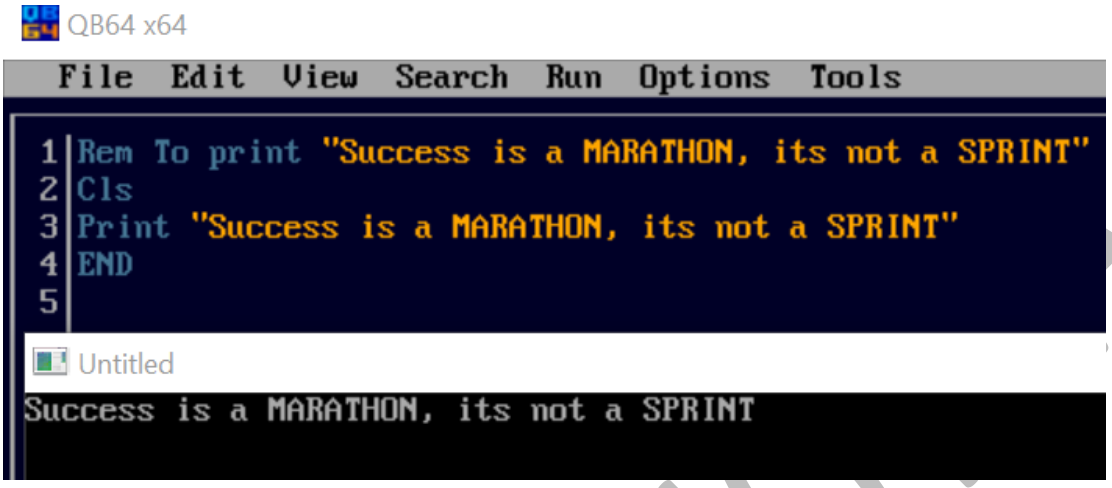
Untitled

```
            ENTRANCE FORM

   NAME           :    _________
   AGE            :    _________
   FATHER'S NAME  :    _________
   ADDRESS        :    _________
   CONTACT NUMBER :    _________
```

(iii) To display thought for the day: “Success is a MARATHON, its not a SPRINT”.

Ans.



Correct the following:

1. **CITY=”ALLAHABAD”**
   Ans. CITY$=”ALLAHABAD”
2. **A=15**
   Ans. CORRECT
3. **B$=”100+10”**
   Ans. B=100+10 (if you want to add 100 and 10)
4. **MONTH=AUGUST**
   Ans. MONTH$=”AUGUST”
5. **2A%=60**
   Ans. A2=60
6. **60/100=MARKS**
   Ans. MARKS=60/100