#### **Assignment - 19**

#### 1. What are the data types used in VBA?

**Ans.** There are several data types that can be used to define variables, constants, and function return types. Integer, long, single, double, currency, date, string, boolean, object.

## 2. What are variables and how do you declare them in VBA? What happens if you don't declare a variable?

**Ans.** VBA, a variable is a named storage location in memory that holds a value of a specific data type. Variables can be used to store values, perform calculations, and manipulate data in a program. To declare a variable in VBA, you use the Dim statement followed by the variable name and its data type.

### 3. What is a range object in VBA? What is a worksheet object?

**Ans.** Range object is used to represent a group of cells or a single cell in a worksheet. The range object can be used to manipulate the data within the cells, format the cells, or perform calculations on the cell values. To create a range object, you can use the Range property of a worksheet object, which specifies the cell or range of cells to be selected.

#### 4. What is the difference between worksheet and sheet in excel?

**Ans.** worksheet is the primary document that you work on within an Excel workbook. A sheet, on the other hand, is a term used to describe any individual sheet within an Excel workbook.

# 5. What is the difference between A1 reference style and R1C1 Reference style? What are the advantages and disadvantages of using R1C1 reference style?

**Ans.** In A1 reference style, cell addresses are referred to by the column letter followed by the row number. For example, the cell in the first column and first row is referred to as cell A1. In R1C1 reference style, cell addresses are referred to by their row number and column number. The advantage of using R1C1 reference style is that it allows for easier use of relative references when creating formulas. The disadvantage of using R1C1 reference style is that it can be more difficult to read and understand.

6. When is offset statement used for in VBA? Let's suppose your current highlight cell is A1 in the below table. Using OFFSET statement, write a VBA code to highlight the cell with "Hello" written in it.

Α В C 1 25 354 362 2 36 6897 962 3 85 85 Hello 4 96 365 56 5 75 62 2662

**Ans.** The OFFSET statement in VBA is used to refer to a cell or range of cells relative to a starting point. It allows you to move a specified number of rows and columns from the current cell and then return a reference to the resulting cell or range.

To highlight the cell with "Hello" written in it, assuming the current highlight cell is A1, you can use the following VBA code:

Range("A1").Offset(5, 3).Select