

**Assignment - 19**

1. What are the data types used in VBA?

Ans: Integer, Single, Double, Date, String, Boolean

1. What are variables and how do you declare them in VBA? What happens if you don’t declare a variable?

Ans: Variables can be declared as one of the following data types: Boolean, Byte, Integer, Long, Currency, Single, Double, Date, String (for variable-length strings), String \* length (for fixed-length strings), Object, or Variant. If you don't specify a data type, the Variant data type is assigned by default. By default, when an undeclared variable is called upon, VBA assigns it as the Variant, which is the largest of the data types stored as 16 bytes. This can accumulate and take up a lot of memory and cause the execution to become sluggish.

1. What is a range object in VBA? What is a worksheet object?

Ans: Range is a property in VBA that helps specify a particular cell, a range of cells, a row, a column, or a three-dimensional range. The Worksheet object is a member of the Worksheets collection. The Worksheets collection contains all the Worksheet objects in a workbook. The Worksheet object is also a member of the Sheets collection. The Sheets collection contains all the sheets in the workbook (both chart sheets and worksheets)

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

Ans: Worksheet have more than one page of sheet whereas sheet is a single page with records.

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

Ans: A1 reference style, you have the column name as an alphabet and the row name as a number and when you select the A1 cell that means you are in column A and row 1. But in R1C1 both column and row are in numbers. Using cell references gives you more flexibility. You can more easily substitute other values for the formula more easily, rather than having to edit the formula each time. This is helpful when you have a table-full of data, and you want to apply a formula to each row, based on the data in the table.

In a complex spreadsheet, you may not want other users manipulating your formula, but you want them to be able to use it. Lock the cell with the formula, but give them access to input cells.

1. 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.

Ans: VBA Offset function one may use to move or refer to a reference skipping a particular number of rows and columns.

Sub HightlightCell\_1

If ActiveCell.Value > Hello then

ActiveCell.Interior.Color = vbRed

End If

End Sub