**Assignment 19**

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

* Numeric Data Types: Integer, Long, Single, Double

String

Boolean

Date, Time, variant

Object

**2. What are variables and how do you declare them in VBA? What**

**happens if you don’t declare a variable?**

* variables are used to store and manage data within your code. They act as placeholders for different types of data, such as numbers, text, dates, or objects. Variables allow you to manipulate and work with data in your VBA programs.

We declare variables using the Dim statement.

I few don’t declared the variable is assumed to be of type Variant. A Variant is a

data type that can hold any type of data, including numbers, strings, dates,

objects, and more.

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

* Range object represents a cell, a group of cells, a single row, a single column, or a rectangular area within a worksheet in a spreadsheet application like Microsoft Excel.

Worksheet object represents an individual worksheet within a workbook in a

spreadsheet application like Microsoft Excel

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

* "Worksheet" and "Sheet" are terms used to refer to different components of a workbook, It is the primary working area where you enter and manipulate data. Each worksheet consists of a grid of cells arranged in rows and columns.

Sheets are available in workbook and there are different types of sheet on which

we can work, such as.

Work sheet, Chart Sheet, Macro sheet

**5. What is the difference between A1 reference style and R1C1 Reference**

**style? What are the advantages and disadvantages of using R1C1**

**reference style?**

* In A1 reference style, cell references are written using the column letter followed by the row number, such as "A1", "B2"

In R1C1 reference style, cell references are written using the row number

followed by the column number, such as "R1C1", "R2C2"

**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.**

**A B C**

**1 25 354 362**

**2 36 6897 962**

**3 85 85 Hello**

**4 96 365 56**

**5 75 62 2662**

* It is used to refer to a cell or range of cells that is a certain number of rows and columns away from a given reference cell

Sub HighlightHelloCellUsingOffset()

Dim currentCell As Range

Dim offsetRow As Integer

Dim offsetColumn As Integer

Dim searchValue As String

Set currentCell = Range("A1")

searchValue = "Hello"

Do

If currentCell.Value = searchValue Then

currentCell.Interior.Color = RGB(255, 0, 0)

Exit Do

End If

offsetRow = 1

offsetColumn = 0

Set currentCell = currentCell.Offset(offsetRow, offsetColumn)

End Sub