**Excel Assignment – 20**

1. Use the above data and write a VBA code using the following

statements to display in the next column if the number is odd or even

1. IF ELSE statement

In [Excel VBA](https://trumpexcel.com/excel-vba/), IF Then Else statement allows you to check for a condition, and perform an action accordingly.

1. Select Case statement

In VBA, the **Select Case Statement** is an alternative to the [**If-Then statement**](https://www.automateexcel.com/vba/else-if-statement), allowing you to test if conditions are met, running specific code for each condition. The Select Statement is preferable to the If Statement when there are multiple conditions to process.

1. For Next Statement

In VBA, looping is used when you need to perform the same task multiple times until a condition is met (or until a condition is true).

1. What are the types of errors that you usually see in VBA?

**In Visual Basic, errors fall into one of three categories: syntax errors, run-time errors, and logic errors.**

* Syntax Errors. Syntax errors are those that appear while you write code. ...
* Run-Time Errors. Run-time errors are those that appear only after you compile and run your code. ...
* Logic Errors.

1. How do you handle Runtime errors in VBA?

To handle an error inline, **use the Resume Next statement with On Error**. Any errors that occur during runtime cause InfoConnect to continue executing the macro at the next statement. If an error occurs, it is handled by opening a dialog box, passing control to another procedure or to a routine within the same procedure.

1. Write some good practices to be followed by VBA users for handling errors

**VBA Error Handling** refers to the process of anticipating, detecting, and resolving VBA Runtime Errors. The VBA Error Handling process occurs when writing code, before any errors actually occur.

**VBA Runtime Errors** are errors that occur during code execution. Examples of runtime errors include:

* Referencing a non-existent workbook, worksheet, or other object ([Run-time Error 1004](https://www.automateexcel.com/vba/error-1004-application-defined-object-defined/))
* Invalid data ex. referencing an Excel cell containing an error ([Type Mismatch – Run-time Error 13](https://www.automateexcel.com/vba/mismatch-errors/))
* Attempting to divide by zero

5. What is UDF? Why are UDF’s used? Create a UDF to multiply 2

numbers in VBA

A **user-defined function** (**UDF**) is a [function](https://en.wikipedia.org/wiki/Function_(programming)) provided by the user of a program or environment, in a context where the usual assumption is that functions are built into the program or environment. UDFs are usually written for the requirement of its creator.User-defined functions (UDFs) are custom functions that **extend the calculation and data-import capabilities of Excel**. Developers create custom calculation packages to provide: Functions that are not built into Excel.