**Excel Assignment 3**

1. What do you mean by “Relative Cell Referencing” in MS Excel and “Absolute cell referencing”?

* Absolute Cell References are used to ‘lock’ a cell in a calculation. This is in contrast to standard Excel references that ‘move’ as the cell that the sit-in moves. Controlling formula references is covered in our [intermediate Excel course](https://www.acuitytraining.co.uk/microsoft-training-courses/excel/). Absolute Cell References should be used when you do not want a cell reference in Excel to change when being copied or filled. If the cell reference is absolute, it keeps rows and columns constant.
* Relative references are great when you want the same formula anywhere else in your sheet as you can copy and paste it straight away. This is particularly useful when you need to have the same calculation repeated across several different rows or columns
* Mixed cell references are a combination of relative references and absolute reference. There are two distinct types of mixed reference.
* Either the column is locked while the row changes when the formula is copied, or the row is locked while the column changes when the formula is copied.

1. How to secure an excel workbook, demonstrate it with an example.

* Select File > Info.
* Select the Protect Workbook box and choose Encrypt with Password.
* Enter a password in the Password box, and then select OK.
* Confirm the password in the Reenter Password box, and then select OK.

1. Explain the pivot tables and their implementations.
2. Explain lookup in excel with suitable examples.

Use LOOKUP, one of the lookup and reference functions, **when you need to look in a single row or column and find a value from the same position in a second row or column**. For example, let's say you know the part number for an auto part, but you don't know the price.

1. What is Data validation, and how to implement it in Excel?

* Select the cell you want to validate. Go to the Data tab > Data tools, and click on the Data Validation button. ...
* On the settings tab, specify your validation criteria.
* You can enter the input message if you want. This step is optional.
* You can also set your custom error message. ...
* Click OK.