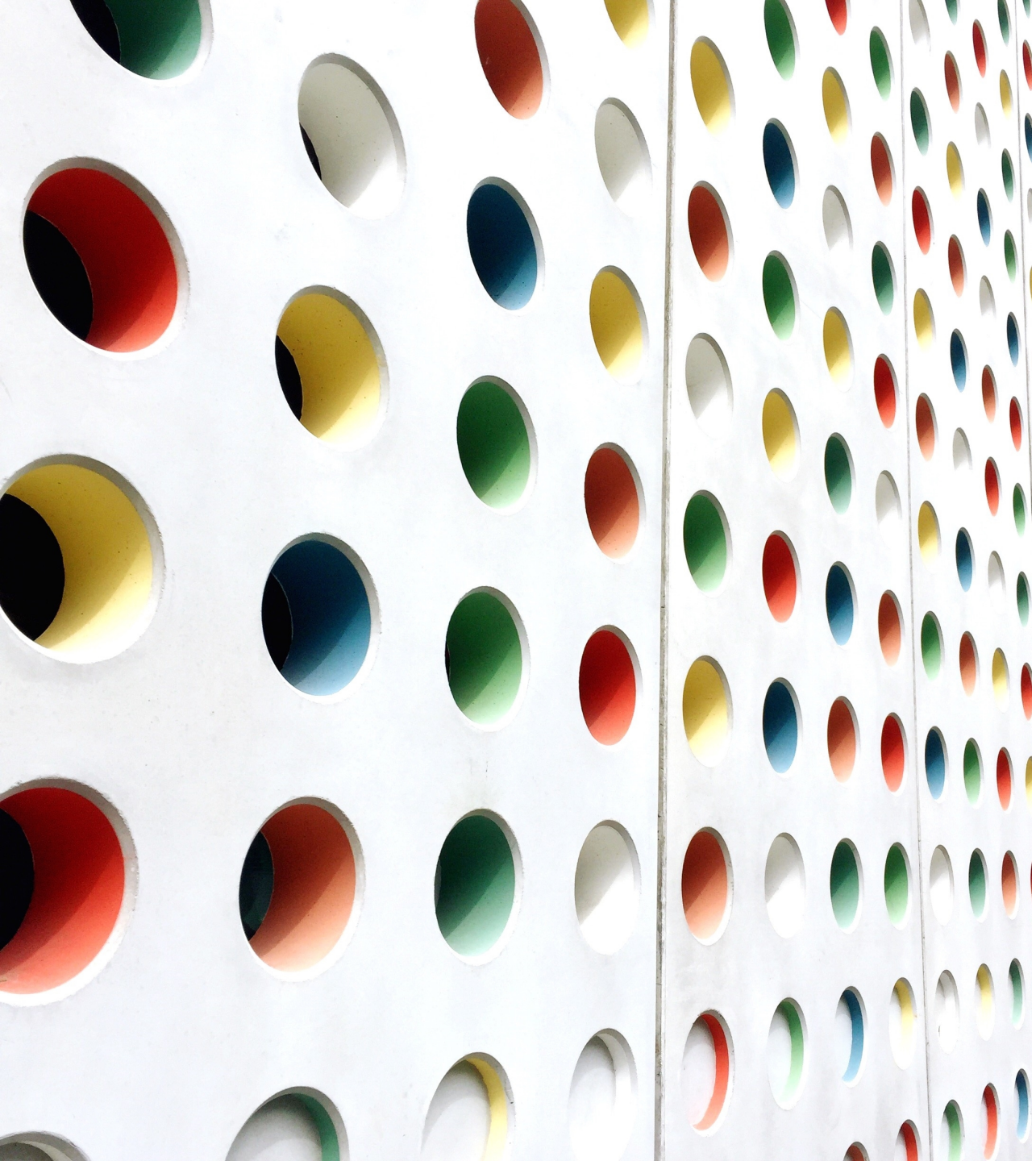


Spreadsheet Exercise

LECTURER: MARK GILLAN

Target tools to be used

Creating and Using a Spreadsheet
(including use of numbers, text and dates)

Formulae (relative and absolute referencing)

Functions (count, total, max/min)

Lookup Table (vlookup)

Graphs and Charts
(nonadjacent columns / rows)

Chart Formatting

Password Protection

Printed Output (whole sheet, selection, individual chart, chart with data)

Have a look at this spreadsheet

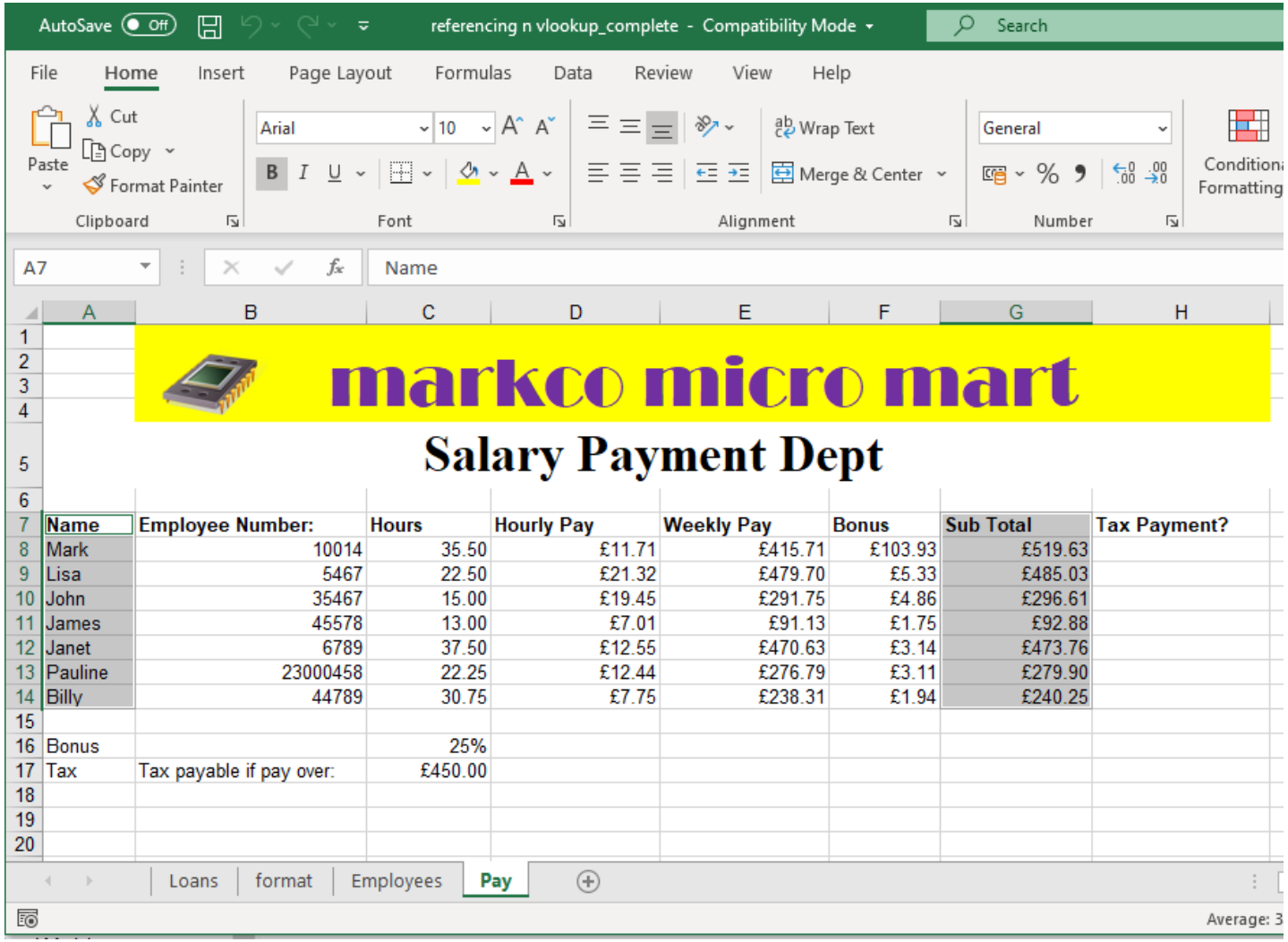
This workbook has a sheet for pay that draws upon the list within the Employees sheet.

The Employee Number is automatically input based upon the Name.

Hourly Pay is linked to the Employee Number listed in the Employees sheet.

Weekly Pay has a formula copied down using relative referencing.

Bonus is calculated using the Bonus of 25% cell and copied down using absolute referencing.



Name	Employee Number:	Hours	Hourly Pay	Weekly Pay	Bonus	Sub Total	Tax Payment?
Mark	10014	35.50	£11.71	£415.71	£103.93	£519.63	
Lisa	5467	22.50	£21.32	£479.70	£5.33	£485.03	
John	35467	15.00	£19.45	£291.75	£4.86	£296.61	
James	45578	13.00	£7.01	£91.13	£1.75	£92.88	
Janet	6789	37.50	£12.55	£470.63	£3.14	£473.76	
Pauline	23000458	22.25	£12.44	£276.79	£3.11	£279.90	
Billy	44789	30.75	£7.75	£238.31	£1.94	£240.25	
Bonus		25%					
Tax	Tax payable if pay over:	£450.00					

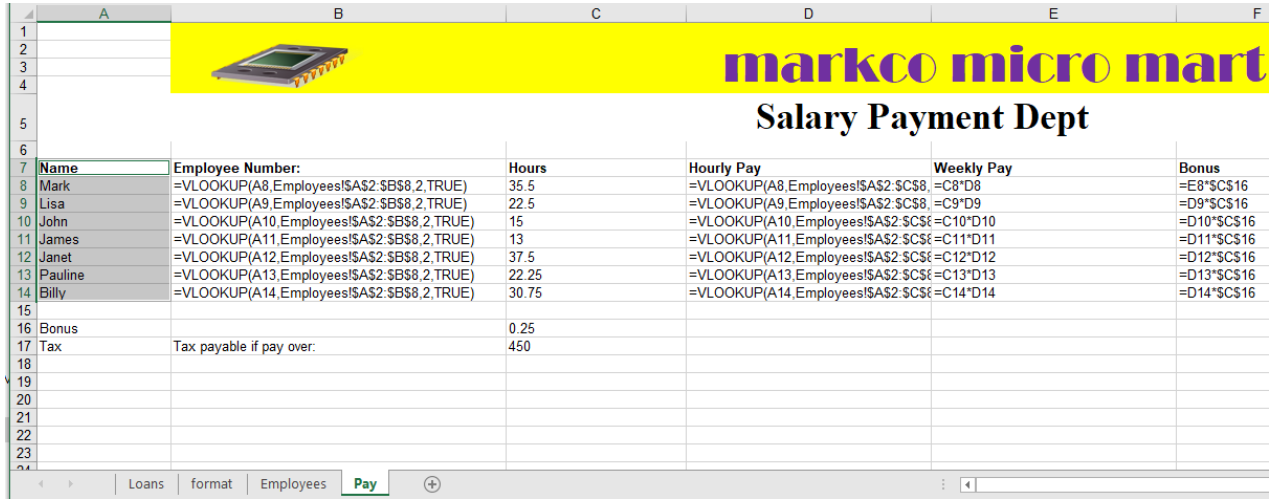
The Spreadsheet Exercise

You are required to create a Spreadsheet workbook with a couple of sheets

Using imagination, think of a business name, products or services, item reference numbers (SKU), costings and generally build a spreadsheet listing orders

The sheet will link to another sheet for bringing data automatically into the first sheet and you will make use of relative and absolute referencing for formulae

Various tools will be required within Microsoft Excel and the exercise consists of a few pages, ending only when instructed. Work your way through …



markco micro mart

Salary Payment Dept

	A	B	C	D	E	F
7	Name	Employee Number:	Hours	Hourly Pay	Weekly Pay	Bonus
8	Mark	=VLOOKUP(A8,Employees!$A$2:$B$8,2,TRUE)	35.5	=VLOOKUP(A8,Employees!$A$2:$C$8,	=C8*D8	=E8*$C$16
9	Lisa	=VLOOKUP(A9,Employees!$A$2:$B$8,2,TRUE)	22.5	=VLOOKUP(A9,Employees!$A$2:$C$8,	=C9*D9	=D9*$C$16
10	John	=VLOOKUP(A10,Employees!$A$2:$B$8,2,TRUE)	15	=VLOOKUP(A10,Employees!$A$2:$C$8	=C10*D10	=D10*$C$16
11	James	=VLOOKUP(A11,Employees!$A$2:$B$8,2,TRUE)	13	=VLOOKUP(A11,Employees!$A$2:$C$8	=C11*D11	=D11*$C$16
12	Janet	=VLOOKUP(A12,Employees!$A$2:$B$8,2,TRUE)	37.5	=VLOOKUP(A12,Employees!$A$2:$C$8	=C12*D12	=D12*$C$16
13	Pauline	=VLOOKUP(A13,Employees!$A$2:$B$8,2,TRUE)	22.25	=VLOOKUP(A13,Employees!$A$2:$C$8	=C13*D13	=D13*$C$16
14	Billy	=VLOOKUP(A14,Employees!$A$2:$B$8,2,TRUE)	30.75	=VLOOKUP(A14,Employees!$A$2:$C$8	=C14*D14	=D14*$C$16
16	Bonus		0.25			
17	Tax	Tax payable if pay over:	450			

Loans | format | Employees | Pay

Create a spreadsheet

Create a spreadsheet for a small business, you can make the industry of choice, possibly thinking about your future maybe?

Name the Excel Workbook file: BusinessOrders

Name sheet 1: Orders

Use headers: SKU, Product, Unit Cost, Ordered Amount, Whole Order Cost, Profit, Selling Price, VAT, Total Price inc VAT

You should also include the current date, format Costs and Total Price with currency. The rate of VAT is standard 20% and SKU (item number).

On another sheet within the same Workbook, list at least 15 products (can also be services), providing a SKU in the first column, product name, unit cost for that product/service. Use your imagination to enter the number of units for each order and the profit you require in currency.

Name this sheet: Products

An Example using headers

	A	B	C	D	E	F	G	H	I
1	MarkCo Product Order Planning and Sales								
2									
3	SKU	Product	Unit Cost	Ordered Amount	Whole Order Cost	Profit	Selling Price	VAT	Total Price (inc. VAT)
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									

Lookup Table (VLOOKUP)

Use a VLOOKUP function to create a formula that looks up the SKU and automatically inserts the Product Name / Service Name by means of matching the SKU after typing

Copy the VLOOKUP function down at least 8 different orders to which you will create, using relative and absolute referencing where applicable

Formulae – continued

- Insert a formula to calculate the 'Whole Order Cost', taking into consideration the number of items ordered and the unit cost. Copy this formula down the rows for each product/service using relative referencing
- Do the same for 'Selling Price', calculating out using a formula taking into consideration the Whole Order Cost plus the Profit.
  Copy this formula down using relative referencing or absolute referencing, as applicable to your needs
- Insert a formula to calculate the VAT amount by inserting the rate of VAT (20%) in a cell by itself below the table and use absolute referencing for filling the formula down the rows for each product/service
- Insert a formula to calculate the Total Price (inc. VAT) in the relevant cell and fill the formula down the rows for each item
- Move onto the next part of the exercise …

Other Functions

- Use a relevant function within a formula in a cell under the table, to count the number of products/services within the list of items, labelling the cell to the left as: Number of items

Number of items in the list

- Use a relevant function within a formula in a cell under the table, to total all the 'Total Price (inc. VAT)' values within the list of items, labelling the cell to the left as:
Total Revenue inc. VAT

Grand Total / Total Revenue including VAT

- Use a relevant function within a formula in a cell under the table, to declare the highest cost of all the products/services within the list of items, labelling the cell to the left as: Highest Cost

Highest Cost of all the costs in the list

Create a chart for all orders, using the labels of product or service names to illustrate the VAT for each in comparison to each other (column chart)

Format the column chart to have different colours for each product or service to make it easier to view, incorporating a datasheet view along with the chart, placing the chart on a sheet of its own, naming the sheet: VAT chart

Create another chart (pie chart) to illustrate the number of units for each product or service. Place overall comparison percentages next to each segment of the pie, placing the chart underneath the table data (list of orders)

Charts

Password Protection

- Save the Workbook file as the original name: BusinessOrders
- Save a copy of the workbook file, naming the copy file as: OrdersProtected
- Apply a Password Protection to the copied file, using the password: scoosh
- Save the Password Protection on the file to ensure it cannot be opened without the valid password –
  Note: be careful with the password to ensure it is correctly done

Using screenshot evidence

Capture screenshots of the following ability to print (no need to print hard copies, just show your ability to print using screenshot evidence), into a Microsoft Word document, labelling each screenshot evidence, naming the Word document file: SSPrintEvidence

- Print of the whole sheet, 2 copies
- Print of the SKU and product/service name for each order
- Print of the pie chart only

CHECK TO ENSURE ALL HEADERS USED CORRECTLY, SUFFICIENT DATA, ALL FORMULAE COMPLETE, CHARTS DONE.

CHECK AGAIN ALL REQUIREMENTS WITHIN THE EXERCISES HAVE BEEN DONE, CHECK OFF THE TARGET POINTS

End of the Spreadsheet Exercise