Bringing British Education to You

www.nccedu.com

Office Solutions Development

Topic 4:

Advanced Features and Functions of Microsoft Access, Excel and Word

Scope and Coverage

This topic will cover:

- Some of the advanced features and functions of Microsoft Access, Excel and Word.

Bringing British
Education to You
www.nccedu.com

Learning Outcomes

By the end of this topic, students will be able to:

- Have knowledge of some of the advanced features and functions in Access (we will use some of these with macro development in Topic 7)

- Develop some of the advanced features and functions in Excel

- Develop some of the advanced features and functions in Word

Bringing British Education to You
www.nccedu.com

Terminology

- Terminology will be explained in the lecture, tutorial and laboratory session. You should take notes!

- Ask questions if you do not understand.

Uses of Advanced Features and Functions

- These are used for many purposes, such as:

  - keeping records of customer names, staff details, etc.

  - budgeting and forecasting

  - analysing business data

  - developing invoices and other forms

  - producing graphs from data

Bringing British
Education to You
www.nccedu.com

Access, Excel and Word

- These three applications are being referred to because they contain dynamic and efficient advanced features and functions such as:

  - data entry, reports, queries (Access)

  - conditional formatting, LOOKUP function Pivot Tables (Excel)

  - templates and mail merge (Word)

Access: Data Entry

- A user can develop forms that can be used for data input.

- These forms can contain control properties to ensure that the data that is being input accurately, such as having to select from a set number of options, e.g. a list box.

- Forms can include macro instructions and we will discuss this further in Topic 7.

Access: Reports

- A user can customise a report and include features such as conditional formatting, e.g. to highlight the names of customers who still owe payment or products that are no longer for sale.

Access: Queries

- Include:
    - *parameter queries* (prompts a user for criteria when the query is run, so specific data can be extracted)
    - *parameter queries with multiple criteria* (prompts a user for each criteria)
    - *summary queries* (do not show individual records only summaries of averages, totals and any other calculations)
    - *using functions in queries* (where calculations are applied, e.g. displaying pass or fail grades according to if a mark is < or > 50)

Bringing British Education to You
www.nccedu.com

Excel: Conditional Formatting

- Conditional formatting is used in Excel to enable the user to create rules that change the formatting in a cell based on the values in the cell.

- It is useful for highlighting parts of the spreadsheet when certain conditions are met, e.g. exam grade recording, sales figures records.

Example of Conditional Formatting
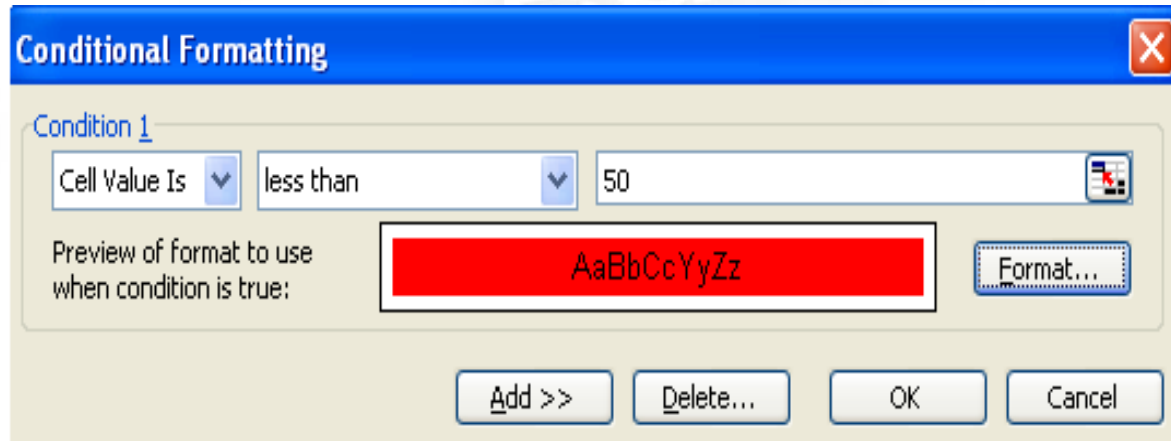
Conditional formatting has been applied to highlight grades less than 50.

Excel: LOOKUP Function

- You may need to find a product or product part by its product code or extract data from a large list for a mail merge or to complete an invoice.

- This can take time unless you use the LOOKUP function. It can help you find specific information in large lists of data quickly and efficiently.

- There are two types of LOOKUP function:
    - *VLOOKUP* and *HLOOKUP*

VLOOKUP

- A VLOOKUP is so-called because it looks up (searches for) the data based on a cell reference in a <u>V</u>ertical list:

	A	B	C	D	E	F
1	**Customer Number**	**Sales to Date**	**Region**	**Order Number**	**Product ID**	**Quantity**
2	1014.0	£6,321	3	1001	13-6655	5
3	1092	£3,591	3	1001	10-6025	10
4	1437	£2,970	2	1002	10-4430	5
5	1486	£3,752	2	1002	13-9672	7
6	1490	£1,850	1	1002	12-8390	3
7	1503	£1,300	1	1002	14-8417	3
8	1776	£1,457	1	1003	12-3167	3
9	1836	£3,796	3	1003	11-8994	6
10	1842	£12,561	3	1003	12-8478	8
11	1923	£4,555	3	1003	13-3251	9
12	2113	£1,251	2	1004	10-2562	8
13	2401	£1,865	1	1004	11-2235	7
14	2500	£6,792	1	1004	12-2587	10
15	2503	£7,040	2	1004	13-2869	7
16	2550	£1,206	2	1005	11-8771	7
17	2559	£2,501	2	1005	11-8994	6
18	2599	£2,396	3	1006	13-8261	8
19	2884	£4,790	2	1006	10-7381	4
20	2905	£4,221	3	1006	14-7321	30
21	3032	£2,586	2	1006	12-8521	12
22	3285	£8,506	3	1006	13-9672	5
23	3504	£2,208	2	1007	13-8309	10
24	3598	£3,220	1	1007	13-8713	8
25	3711	£4,497	1	1007	13-8971	5
26	3776	£3,446	1	1007	14-8613	5
27	3783	£5,251	2	1007	14-8515	20
28	3853	£9,251	3	1007	14-8819	15
29	3854	£5,500	1	1023	10-9106	8
30	3885	£1,481	2	1023	12-3167	20

HLOOKUP

- An HLOOKUP is so-called because it looks up (searches for) the data based on a cell reference in a Horizontal list.

- It can be used if data is set out horizontally in rows, rather than in columns.

	A	B	C	D	E
1	Customer Number	1014.0	1437	1486	1490
2	Sales to Date	£6,321	£3,591	£2,970	£3,752
3	Region	1	1	3	3
4	Order Number	1001	1001	1002	1002
5	Product ID	13-6655	10-6025	10-4430	13-9672
6	Quantity	5	10	5	7
7					
8					

Bringing British
Education to You
www.nccedu.com

Excel: Pivot Tables

- These enable users to analyse large amounts of data, which can be sorted, counted and totalled.

- Reports can be produced from the table that summarise the data.

- Data can be imported or linked to other sheets and workbooks.

- Graphs can also be generated from the data found.

Bringing British
Education to You
www.nccedu.com

Pivot Table Example

Sum of sales to date in each region

	A	B	C	D	E	F
1	Customer Number	Sales to Date	Region	Order Number	Product ID	Quantity
2	1014	£6,321	3	1001	13-6655	5
3	1092	£3,591	3	1001	10-6025	10
4	1437	£2,970	2	1002	10-4430	5
5	1486	£3,752	2	1002	13-9672	7
6	1490	£1,850	1	1002	12-8390	3
7	1503	£1,300	1	1002	14-8417	3
8	1776	£1,457	1	1003	12-3167	3
9	1836	£3,796	3	1003	11-8994	6
10	1842	£12,561	3	1003	12-8478	8
11	1923	£4,555	3	1003	13-3251	9
12	2113	£1,251	2	1004	10-2562	8
13	2401	£1,865	1	1004	11-2235	7
14	2500	£6,792	1	1004	12-2587	10
15	2503	£7,040	2	1004	13-2869	7
16	2550	£1,206	2	1005	11-8771	7
17	2559	£2,501	2	1005	11-8994	6
18	2599	£2,396	3	1006	13-8261	8
19	2884	£4,790	2	1006	10-7381	4
20	2905	£4,221	3	1006	14-7321	30
21	3032	£2,586	2	1006	12-8521	12
22	3285	£8,506	3	1006	13-9672	5
23	3504	£2,208	2	1007	13-8309	10
24	3598	£3,220	1	1007	13-8713	8
25	3711	£4,497	1	1007	13-8971	5
26	3776	£3,446	1	1007	14-8613	5
27	3783	£5,251	2	1007	14-8515	20
28	3853	£9,251	3	1007	14-8819	15
29	3854	£5,500	1	1023	10-9106	8
30	3885	£1,481	2	1023	12-3167	20

	A	B	C	D	E
1					
2					
3	Sum of Sales to Date				
4	Region	Total			
5	1	68795.89			
6	2	51138.08			
7	3	93147.02			
8	Grand Total	213080.99			
9					
10					

Word: Templates

- This is useful for documents that will be used many times, such as a document containing a letterhead.

- This helps save time and effort and improve productivity.

- Templates can also apply to reports, memos, brochures, etc.

- They are also used in Excel (invoices, order forms, etc.) and Access (reports, order forms, etc.).

Word Templates

Word: Mail Merge

- Enables a user to produce duplicate copies of a document with each copy being customised in a certain way, e.g. the recipient name and address will be different on each one.

- This saves considerable time and effort in producing business documents, such as letters, labels and envelopes.

Mail Merge Sample Documents

Bringing British
Education to You
www.nccedu.com
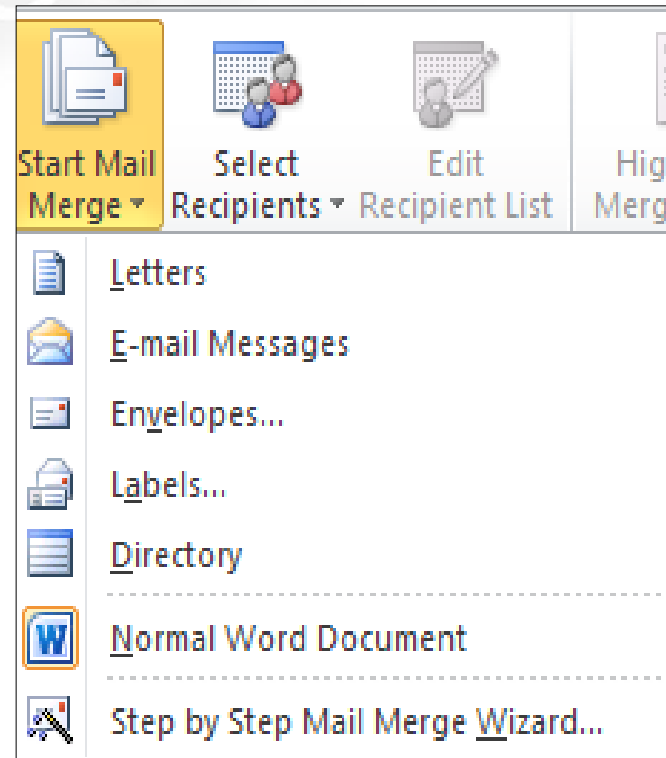
Mail Merge Stages of Development - 1

- There are a number of stages involved in a mail merge:

  1. Decide what type of merge is required (letter, labels, etc.)

  2. Produce the document that will be used for the merge.

  3. Create/open the data source that will be used to provide the personal details for each copy, e.g. names and addresses.

Mail Merge Stages of Development - 2

4. Insert data fields into the document where the personal details and other details (such as the current date) can be added.

5. Perform the merge to create the copies of the document.

Bringing British Education to You
www.nccedu.com

References

- Microsoft Office online help (2011)
  http://office.microsoft.com

Bringing British Education to You
www.nccedu.com

Topic 4 – Advanced Features and Functions of Microsoft Access, Excel and Word

Any Questions?

NCC education

Bringing British
Education to You
www.nccedu.com