

INFORMATION TECHNOLOGY

SPREADSHEETS

Part 1

Exercise

Built-In Lists

1. Start Excel Spreadsheet
2. In cell B1 enter “Mon”
3. In cell C1 enter “Tue”
4. Select cell C1
5. At the bottom right corner of cell C1 is a small black square. Move Mouse cursor towards square until mouse cursor changes to a “+”, then hold down left mouse button and drag mouse to the right to cell O1 and release the mouse button. (days of week shown in headings)
6. In cell A2 enter “Jan”
7. In cell A3 enter “Feb”
8. Select cell A3 and drag down to row A13 (months of year shown)
9. In cell A14 enter 1 and drag it
10. In cell B14 enter 1, B15 enter 2 then drag them
11. Highlight cells B14 and B15 (move mouse pointer to cell B14 and left mouse click. Press the left mouse button and hold down. While holding down mouse button move mouse pointer to cell B15 and release mouse button)

12. At the bottom right corner of cell B15 is a small black square. Move Mouse cursor towards square until mouse cursor changes to a “+”, then hold down left mouse button and drag mouse to the down to cell B25

Spreadsheets provides the following built-in, day-of-the-week, and month-of-the year custom lists.

Built-in lists

Sun, Mon, Tue, Wed, Thu, Fri, Sat

Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

January, February, March, April, May, June, July, August, September, October, November, December

NOTE You cannot edit or delete a built-in list, but you can also create your own custom list. For example:

Custom lists

High, Medium, Low

Large, Medium, and Small

North, South, East, and West

Senior Sales Manager, Regional Sales Manager, Department Sales Manager, and Sales Representative

To create your own Custom List:

File | Options | Advanced

“Edit Custom Lists” button in General section

Formulas

Formulas are equations that are used to analyse and calculate the numeric values. A formula, which usually begins with an equal mark (=), to perform some simple calculations such as addition, subtraction, multiplication and division.

BODMAS (Brackets, Of, Divide, Multiply, Add, Subtract)

1. File | New

2. [A1] 5

3. [A2] 9

4. [A3] 3

5. [A4] =A1+A2+A3 17

6. [A5] =A1*A2+A3 48

$$7. [A6] = A1 * (A2 + A3) \quad 60$$

$$8. [A7] = A1 - (A2 / A3) \quad 2$$

Column Width

9. [D4] = “To be or not to be that is the question”

10. Increase Column width manually

[-Place the mouse pointer on the boundary line between columns D and E in the column header

-The pointer will change to a double - headed black arrow as shown in the image above

-Click and hold down the left mouse button and drag the double - headed arrow to the right to widen column D or to the left to make the column narrower

-Release the mouse button when the desired width is reached]

11. Increase Column width using AutoFit

[-Place the mouse pointer on the boundary line between columns D and E in the column header. The pointer will change to a double - headed arrow.

-Double click with the left mouse button. The column will automatically adjust its width to match the longest entry in that column]

12. Use WRAP TEXT


a. [This button will increase the Row width]

Functions

A function is a special key word which can be entered into a cell in order to perform a process to some data which is appended within brackets. =

FunctionName(Data) The data often includes a range of cells.

SPREADSHEET automatically recognises the names of these functions provided that they are preceded by an equals sign and finish with brackets.

There is a function button  on the toolbar which offers assistance and useful prompts when entering a function into a spreadsheet cell. There is also a Function tab. Alternatively you can type the function directly into the formula bar.

In Kingsoft Spreadsheets, there are nine kinds of functions, namely Financial, Logical, Text, Date and Time, Lookup and Reference, Math and Trig, Statistical, Engineering, and Information.

Financial Functions

Logical Functions

Text Functions

Date and Time Functions

Lookup and Reference Functions

Math and Trig Functions

Statistical Functions

Engineering Functions

Information Functions

We will look at just three of the many Functions available: SUM(), AVERAGE() and COUNT(). These are common functions and relatively easy to understand. They each apply to a range of cells containing numbers (or blank but not text) and return either the arithmetic total of the numbers, the average mean value or the quantity of values in the range.

Excel Functions: Sum, Average, Count

1. Open file Documents/u3a-work/*patients.xls*

-	A	B	C
1	Patients seen by Doctors		
2			
3		This Year	Last Year
4	Dr Smith	120	110
5	Dr Lam	80	70
6	Mrs Dapper	50	
7			
8			
9	Total patients		
10	Average number seen		
11	Number of values		

2. Add data to Row 7

[A7] "Prof. Plum"

[B7] 102

[C7] 105

3. [B9] =B4+B5+B6+B7 352

4. Replace the formula in B9 with:

[B9] =SUM(B4:B7) 352

5. In the spreadsheet add the two functions as follows:

[B10] =AVERAGE(B4:B7) 88

[B11] =COUNT(B4:B7) 4

6. Left click cell B9

At the bottom right corner of cell B9 is a small black square. Move Mouse cursor towards square until mouse cursor changes to a “+”, then hold down left mouse button and drag mouse to the right to cell C9. [The formula in cell B9 is copied into cell C9 but the formula is modified automatically for the Column change]

7. Repeat above with cell B10 to C10 and B11 and drag to C11.

Cell C6 is currently empty. Both AVERAGE() and COUNT() would be affected by placing a zero value in the cell. Doing so would change last years values to 71 and 4 respectively. SUM() is unaffected.

The range need not be limited to a single column. For example the function =COUNT(B4:C7) would return 7.

These three functions only take numeric values into account. They ignore text and blank spaces which may be contained within the range. It is possible to use a variant of the COUNT function called COUNTA() which returns the number of cells in a range containing any numeric or text value. For example the function =COUNTA(A4:B9) would return 10.

-	A	B	C
1	Patients seen by Doctors		
2			
3		This Year	Last Year
4	Dr Smith	120	110
5	Dr Lam	80	70
6	Mrs Dapper	50	
7	Prof. Plum	102	105
8			
9	Total patients	352	285
10	Average number seen	88	95
11	Number of values	4	3

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