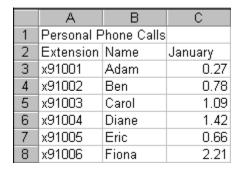# Phone Bills and Graphing Exercise

Getting Started

Start Excel from the **Start** menu.

Data Entry

During this activity you will produce a workbook containing the details of the personal phone calls of a small department.

	A	B	C
1	Personal Phone Calls		
2	Extension	Name	January
3	x91001	Adam	0.27
4	x91002	Ben	0.78
5	x91003	Carol	1.09
6	x91004	Diane	1.42
7	x91005	Eric	0.66
8	x91006	Fiona	2.21

Type the following data into your new worksheet, keeping to the cells indicated.

Formatting

- Make the contents of cells A1, A2, B2, C2 **bold.** (highlight then click the bold tool ▪)
    - Center the cells A2 to A8.(highlight then click the center tool ▤)
- Select cells A1,B1, and C1 then merge and center across selection. (highlight and use your merge tool ▦)
- Set the best fit to columns A, B, and C. (Either double click the line between columns [i.e., line between A and B on top row], or while in the column – use *Format→Column→AutoFit Selection*)
- Select column C and format it to be Currency (▦)
- Rename the current worksheet to be **Phone Bill**.
- Now save your file with the name *yourinitials*_**Per_Ph_Calls**, i.e., **dm_Per_Ph_Calls.**

Formulas and Data fill

- Sum the contents of the cells C3:C8, putting the result in cell C9.
- Change the data in the following cells and note each effect on the total.
- C3 → 1.97
- C4 → 0.28
- C5 → 0
- Use data-fill to enter the months February, March, and April in cells D2:F2 (Click on Cell C2-January, *Edit→Copy*, highlight cells D2-G2, and then *Edit→Fill→Series→Autofill*).
- Under February enter the values 0.43, 1.43, 0.77, 2.04, 0.58 ,2.11 in cells D3:D8. Then perform an AutoSum in cell D9.
- For March enter the figures 0.67, 1.63, 2.33, 1.82, 1.59, 0.42.
- For April enter the figures 0.77, 1.63, 1.92, 2.18, 0.17, 1.62.
- Use data-fill to display the respective totals in cells E9 and F9.
- Ensure that columns C:F are centered and formatted to be currency. (you use the centering tool and currency /$ tool)
- For each person, work out the **average value** of their personal phone bill each month (Click in cell, i.e. G3; type *=average(*"highlight C3→F3"*)* and then hit enter. Click on the value you just calculated. *Edit→Copy* and then highlight the rest of the column and then *Edit→Paste*).

Re-Design

- Select the range of cells C9:F9 and drag them to C10:F10. (cut and paste—showing how you can move a chunk of data)
- Select the cells in the range A1:F10. (cut and paste—you can also move entire tables of data)
- Move these cells to the range starting at cell C2.
- Select the cells C2:H11 and apply the **Classic 3** format to them (*Format→AutoFormat→Choose Classic 3*).

Summary Exercise

- Open a new sheet and rename it **Amount Received**. Use all the above techniques to build a nicely formatted table.
- Give the table a main title, then beneath it have columns for Extension, Name, and January, February, March, April.
- Fill in data for the whole table, indicating that some people have paid their bill and some have defaulted. You can create your own data or use the earlier data but have Carol forgot to pay Jan., Feb., and April. Fiona forgot to pay in Jan., and April.
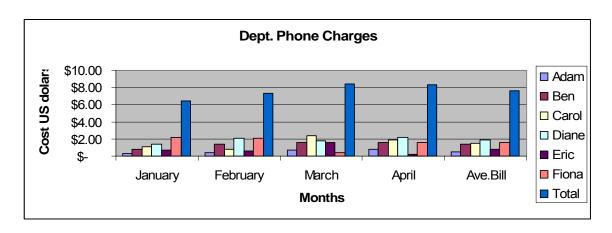- Display the amount received per month.

- Finally, display total money owed and total money received.(to do this you can create a formula indicating what they owed – what they paid). For example, =SUM(C14-C3) . Once you have the formula completed and executed, you can simply copy the cell (which has the formula included) and then highlight the cells you would like the formula to apply to and copy paste. The formula will apply to all the other cells—applying to the data found in those cells.

Create a Chart

- Select some data you would like to show visually. I selected:

Name	January	February	March	April	Ave.Bill
Adam	$ 0.27	$ 0.43	$ 0.67	$ 0.77	$ 0.54
Ben	$ 0.78	$ 1.43	$ 1.63	$ 1.63	$ 1.37
Carol	$ 1.09	$ 0.77	$ 2.33	$ 1.92	$ 1.53
Diane	$ 1.42	$ 2.04	$ 1.82	$ 2.18	$ 1.87
Eric	$ 0.66	$ 0.58	$ 1.59	$ 0.17	$ 0.75
Fiona	$ 2.21	$ 2.11	$ 0.42	$ 1.62	$ 1.59
Total	$ 6.43	$ 7.36	$ 8.46	$ 8.29	$ 7.64

Next click on the Chart wizard button. You will be presented with the sequence of five dialog boxes. Use these to produce a labeled column chart.

The Help System

Use the help system to find out any of the features you couldn't figure out above AND to answer the following:

- If you cannot locate a workbook that you have previously created, how can you search for it?
- How do you remove gridlines from your printout?
- How can you make a given table start at the top of a new printed page?
- How can you have several workbooks open at the same time?
- How do you create a data entry form in Excel?
- What is a pivot table?