# Step 7

**Excel 2007** 

Windows 10

Okt -18 Liljedalsdata.se

## **Beginning**

You must know Step 1, 2.

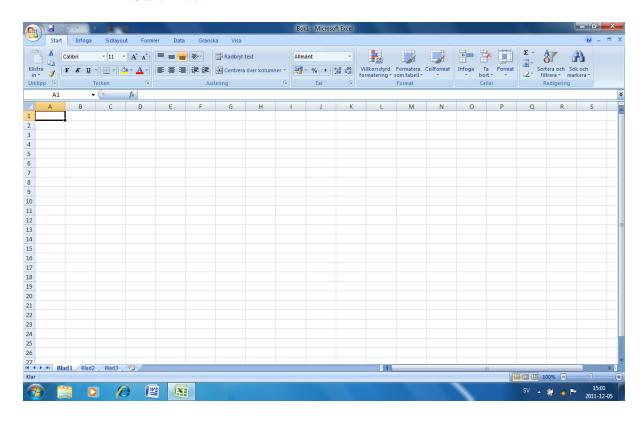
Excel is an applikation which is very useful for different works whithin economy and administration. This course is giving an introduction about how Excel can be used.

If you like more training in Excel you can even choose Step 11.

Start with creating folder Documents\Excel

## En liten budget

Start Excel.



You can see screen is divided in a great number of squares (cells). These are marked with name of columns A, B, C and so on. The rows have numbers from 1 and futher.

In fact only the upper left part of a hugh sheet is shown on screen. Try to move over the sheet with bars to the righ and the lower part of screen.

If you should examine the sheet you should find hundreds of columns and thousends of rows.

By use of name of column and number of row you can give every cell a name. The cell on top of screen to the left in named A1. You always have at least one cell marked and you can move mark with arrow bottoms Up, down, left, right.

Now place cell mark at B2.

In every square you can write digits, letters or formula. Write Januari i square B2.

Notice text occurs in square and in field above the sheet called editing row.

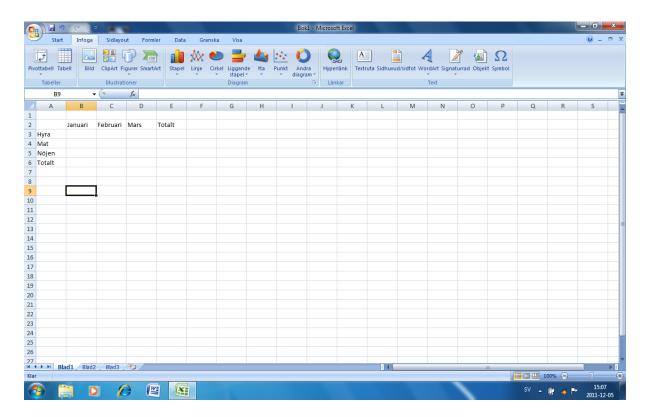
To fix text to square you can press <Enter> or move cellmarker.

Now text is left hand placed.

If you now, after establishing, want to change text you can mark the cell and click in cursor somewhere on editing row. When you are ready you must press <Enter> befor you can continue.

Now continue to write Februari in C2, Mars i D2 and Total in E2.

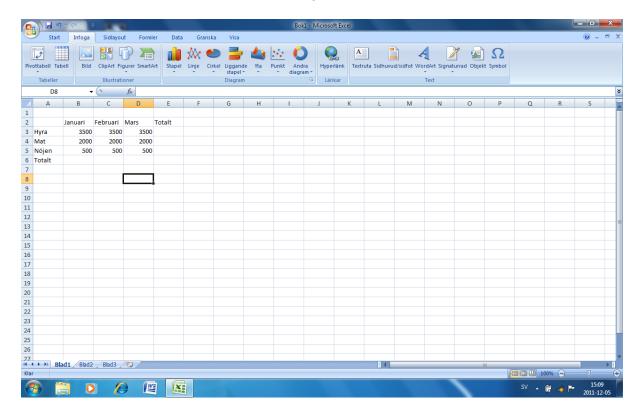
Do in the same way and write Rent, Food, Pleasure and Total in A3, A4, A5 and A6.



Now you have taken your first step against a small budget.

Now you decide rent for Januari is 3500 and these amounts will be true.

#### Do not write total amount yet.



Notice you are not allowed to have space in numbers.

Notice numbers will be written to the right and texts to the left.

Now when you shall count total rent for whole quarter you should be able to sum it to 10500 kr. Though there are many advantages with leaving this to Excel. Therefore don't write 10500 in E3 but write =B3+C3+D3.A formula always start with =.

When you press <Enter> or move cursor the formula will disappear and the sum 10300 is in E3. Notice that if you move cursor back the formula is shown in the field obove the sheet. In this way you can check if a cell has digits or a formula.

Now you want corresponding formula in cells E4 and E5. These you don't need to write.

Mark E3, E4 and E5 by placing cursor on E3, preess left bottom on mouse and drag over E4 och E5.

When these three cells are marked you can copy formula by clicking Start/Edit/Fill/Down. Formula now will be copied and change depending on where it is.

Check you can read a correct formula on edit row concerning E4 and E5.

In the same way you now write =B3+B4+B5 in cell B6 and copy this formula to C6 and D6 by marking B6, C6, D6 and click Start/Edit/Fill/Right.

Check formula in C6 and D6.

#### Format the budget

Now you want to create a headline to budget.

Place cursor on A1.

Write Main budget and press <Enter>.

Mark row 2..

Click right in marked area and click Insert.

Now you have got an empty row.

Mark A1 and click Start/Letter/Bold.

Click Start/Letter/Down arrow to the right of size 11.

Mark 20.

Notice text in A1 is even in B1 and C1. This is no problem.

Mark row 7.

Click right in marked area and choose Insert.

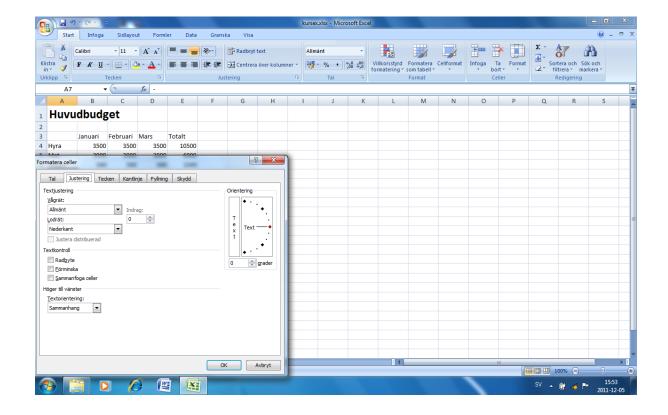
Now you have an empty row.

Mark A7.

Write a hyphen and press<Enter>.

Mark A7.

Click right and choose Format cells/Adjustment.



Click arrow down in top square where text horizontally is.

Mark Fill and click OK.

Now you hopefully have line in whole cell A7.

Copy cell with line to B7, C7, D7 by marking and click Start/Edit/Fill/Right.

To make the budget proper you now shall place headline of columns to the right.

Mark B3, C3, D3, E3.

Click Start/Adjustment/Adjustment right.

Change the predicted cost for food 2000 SEK in January to 2500 SEK.

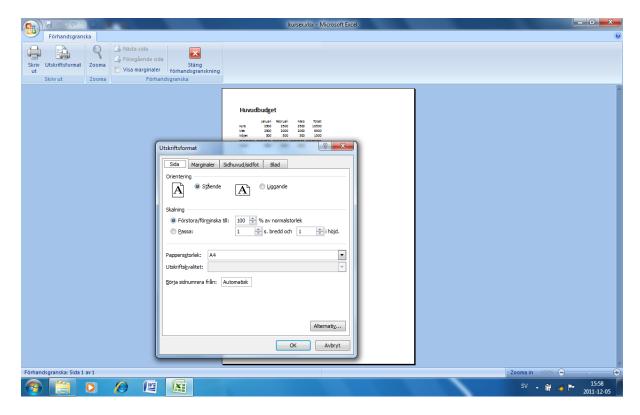
If you have done everything in he right way all digits depending on cost of food be automaticly changed.

Save your budget in Documents\Excel as budget1 by clicking
Officebottom/Save. Check filename budget1 and folder is Documents\Excel

### **Print budget**

When you are ready to print the budget there is many adjustments you may change.

Click Officebottom/Print/Preview/Form of print/Page.



Check you have vertical A4.

Click Page.

Check lines not marked.

Click Close Preview.

Print budget thru clicking Office bottom \Print, choose printer and click OK.

# Huvudbudget

	Januari	Februari	Mars	Totalt
Hyra	3500	3500	3500	10500
Mat	2000	2000	2000	6000
Nöjen	500	500	500	1500
Totalt	6000	6000	6000	

#### Two calcylations on same page

Suppose you want to add a calculation of cost for food in Januari.

The finished budget consisting of mean budget and calculation of cost for food in Januari you will name budget2.

Click Officebottom/Save as.

Write budget2 as name of file and save in C:\User\Lisa\My dokuments\Excel.

This means you save your budget even as budget2.

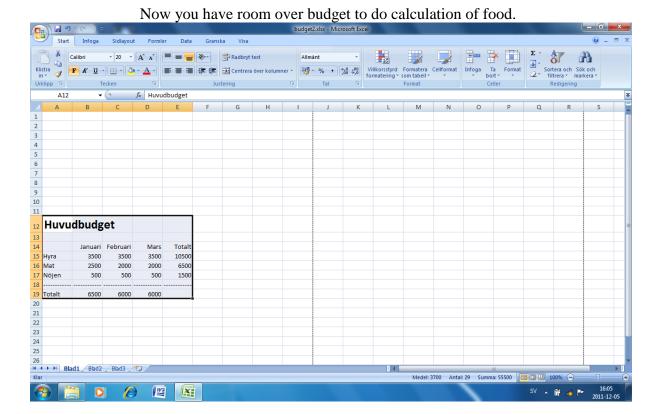
The first one budget1 is still unchanged.

Now here in budget 2 you shall add a calculation of cost for food in Januari, on top of the budget.

Mark the whole budget by placing cursor in A1 and drag down to E8. The whole budget now will be marked. You even may mark A1 and press <Shift> while marking E8.

Click right in marked area and and choose cut.

Markera A12. Click right and choose Paste.



Mark A1.

Write Cost for food in Januari in A1 and press <Enter>...

Mark A1.

Clicka Start/Figures/Bold.

Choose size 20.

Mark A4.

Write: Potatoes

Go on with Meat. Vegetables, Milk, Lunch, Number/weght kg, Price/st/kg, Total kr.

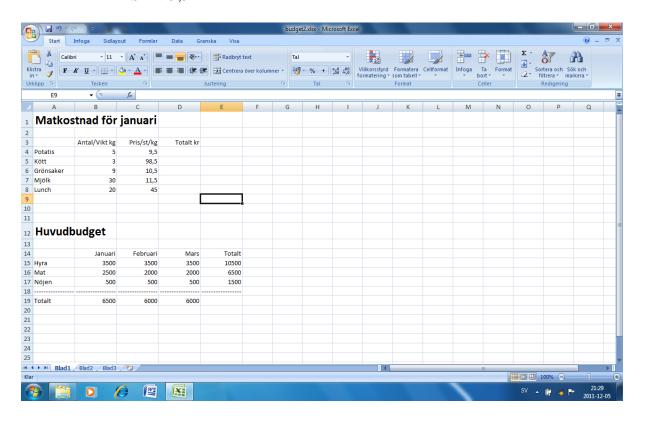
You don't have to worry if there is too little space for head line.

Mark B4.

Skriv 5.

Mark C4.

Skriv 9,5



Write digits in calculation exept totals.

Write formula in D4 = B4\*C4 and copy to D5, D6, D7 and D8 by marking and clicking Start/Edit/Fill/Down.

As you can see there is not room enough for all head lines. This is a commun problem in Excel. One method is to consider what space is needed for the longest headline, in this case Number/weight/kilo.

Mark kolumn B by clicking on top of column B.

Move cursor over limit between B and C. When cursor is a double arrow you can move limit to the rigt so hedline has room enough.

Click right in marked area and choose broad of column. Notice the actuel broad. If the new value is enough you give all columns the same value.

Mark all columns and givet hem the new value.

The best design usually is to have same broad on all coloumns.

Markera D9.

To get sum in D9 you can click Start/Edit/Sum.

You get suggestion you will add D4 till D8. (=Summa D4:D8)

This is OK and you can press <Enter>.

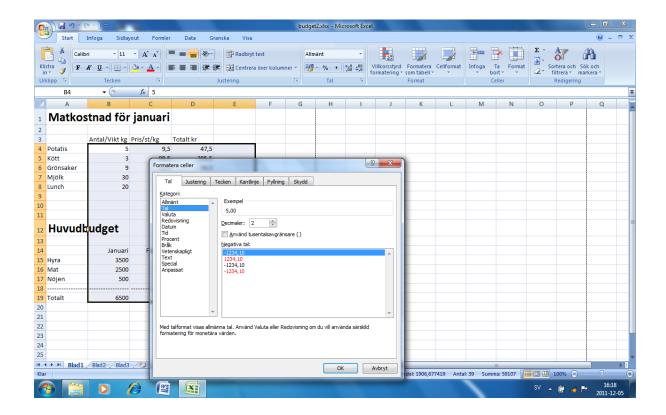
Check sum and formula. You can write formula to add in two different ways.

It's not ok with different number of decimals. Therefore you shall you shall change to two decimals everywhere.

Mark all cells where you have figures which are B4 to E19.

Click right and choose Format cells.

Click Numbers/Numbersl.



Check you have 2 decimals to the right.

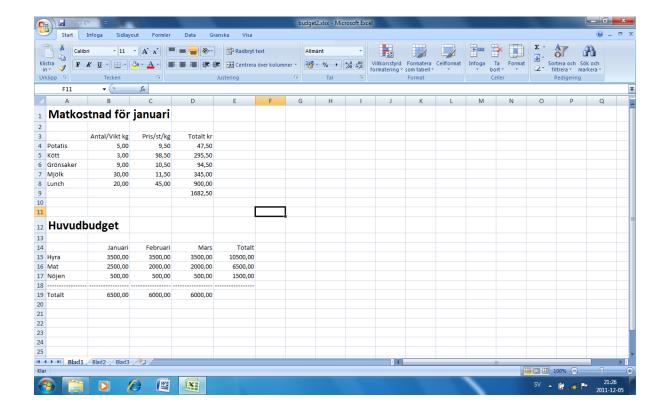
Click OK.

All numbers in calcyl will now be written with 2 decimals.

Adjust all headlines to get a more proper calculaton.

Mark headlines B3, C3, D3.

Click Start/Figure/Adjust to right.



Change buying meat from 3 kg to 5 kg.

Press <Enter>.

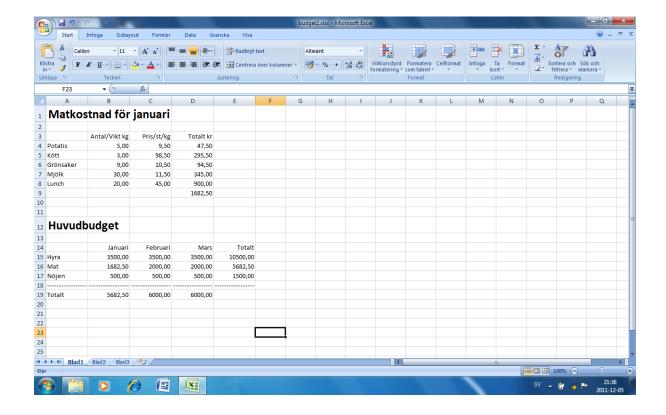
Total now will be 1879,50 kr instead of 1682,50 kr.

Change back to 3 kg meat.

Change number 2500 in B16 to formula =D9.

Press <Enter>.

Now you will have sum 1682,50 kr in D9 and B16 and all calculations depending on cost of food in B16 have been changed.



Click Officebottom/Save.

As earlier have saved this calculation the last version will be saved.

Click Officebottom/Print/Preview/Form of printing/Page.

Check vertical A4 is marked.

Click Page.

Check lines not marked. Click OK.

Now you can see column E Total is missing

Click Form of printing/Page and mark suit

Now you even have column e on paper.

Save Budget 2.

Click Print and OK.

## Matkostnad för Januari

	Antal/vikt kg	Pris/st/kg	Totalt kr
Potatis	5,00	9,50	47,50
Kött	3,00	98,50	295,50
Grönsaker	9,00	10,50	94,50
Mjölk	30,00	11,50	345,00
Lunch	20,00	45,00	900,00
			1682,50

# Huvudbudget

	Januari	Februari	Mars	Totalt
Hyra	3500,00	3500,00	3500,00	10500,00
Mat	1682,50	2000,00	2000,00	5682,50
Nöjen	500,00	500,00	500,00	1500,00
Totalt	5682,50	6000,00	6000,00	

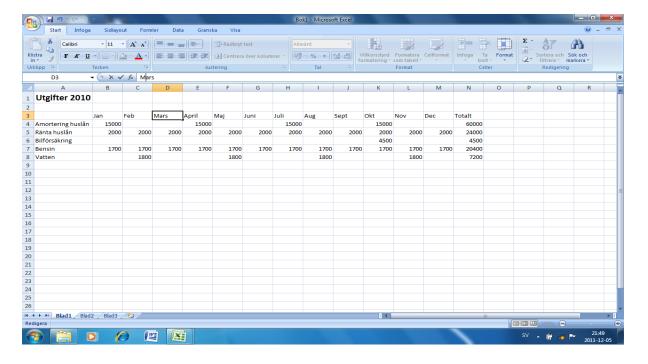
Close kalculation budget 2 with black cross.

Repeat this exercise if you don't think this was easy.

## Overview costs during 2010

Suppose you want an overview of costs during a year.

Click Officebottom/New/Empty/Create.



Write this calculation but don't write totalsums to the right.

Mark row 4 from B4 to N4.

You can drag from B4 to N4 or cklick B4 and click N4 while you press <Shift>.

Click bottom Sum.

Now you will get suggestion add B4 to M4.

Accept suggestion.

Mark N4 to N9.

Click Start/Edit/Fill/Down.

Mark all kolumns from B till N.

Click right in marked area and choose with of column.

Write with of column to 14 and press OK.

If you like to check column total head lines to the left will be vanished.

Mark B4 and Click Show/Windows/lock window pains/Lock window pains.

Now you can move to the right without vanishing hedlines to the left.

In the same way headlines of columns will be left even if you have so many rows that there is no place on screen.

Click Officebottom/Print/Preview/Form of printing/Page.

Mark horisontal A4 and click OK.

In spite of a horisontal paper space isn't enough and you will get 2 pages.

Click form of page/Page, mark Suit and click OK. This means the program change size Very useable elegans.

Click Close Preview.

Save overview as costs 2010 in C:\User/Lisa/My documents\Excel

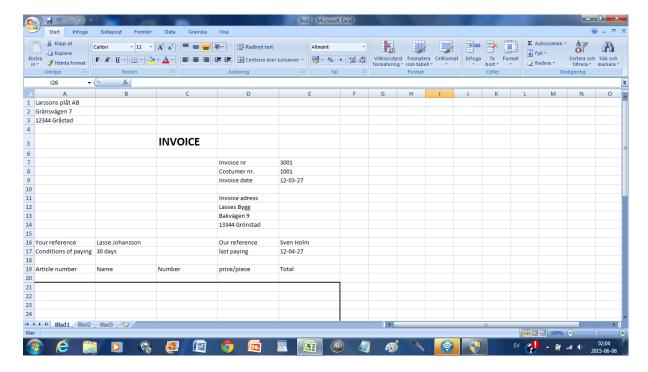
Close calculation with black cross and click OK.

Repeat exercise if you didn't find it easy.

## **Invoiceing by Excel**

Click Officebottom/New/Emty workbook/Create.

If you don't have too many invoices it may be possible to write them in Excel. Advantages are you can tailormake your invoice and write many articles on same invoice.



Start with sender in A1, A2 och A3.

As usual you can ignore if something has not room enough.

Write INVOICE in C5.

Mark C5.

Click Start. Write text in size 20 bold.

To write a date you have to format that cell by clicking format cells, choose date form and mark f.ex. 12-03-27.

Write Invoice nr. 3001, Costumer nr 1001, Date of invoice 12-03-27, Adress of invoice Lasses Bygg AB, Short way 9, 13334 Greentown.

Write Your referens in A16 and the rest like in the picture.

Here it seems as 133 44 Greentown needs biggest room.

Mark column D and increase with so 133 44 Greentown has room.

Click right and choose with of column.

With 17 seems to be enough. Close dialog window.

Mark all columns and increase with.

Adjust text to the left in E7, E8.

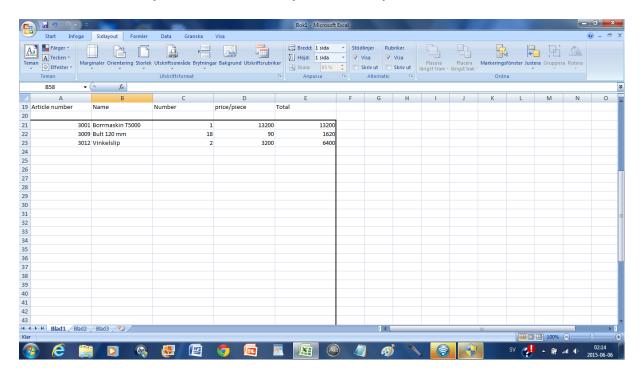
Mark and click Start/djustment/Adjust left.

Try an area and mark by dragging from A21 to E55 or mark A21 and E55 while pressing <Shift>.

Click right in the marked area and choose bottom for border line.

Choose fat square border line.

As you see there are many alternatives you even can delete a line.



Write some articles as above.

In E21 you write formula =C21\*D21 and copy to E22 and E23.

Go down to end of invoice and write t.ex. Besöksadress i A56, Tranvägen 9 in A57 and 122 44 OXSTAD in A58.

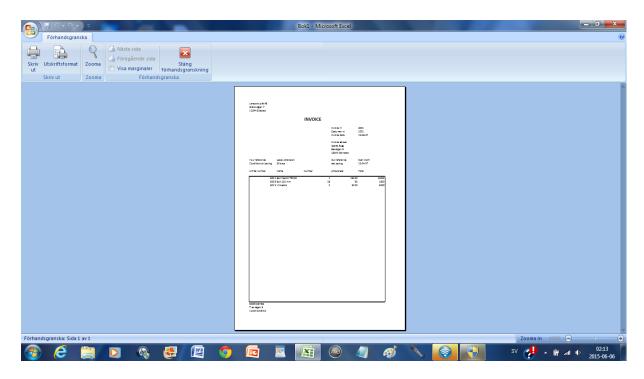
You probably like to write more information but you can test invoice on a paper.

Click Officebottom/Print/Preview/Form of printing/Page and check vertical A4 and fit are marked. Check flat page no lines is marked. Mark suit.

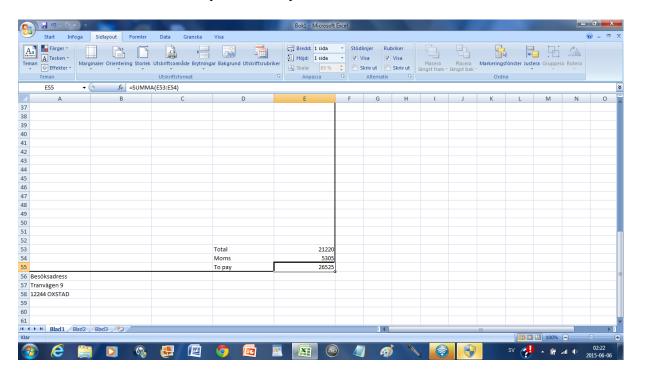
Click OK.

Print invoice.

Close Preview.



Adjust articles to center and write text och formula in E53 =SUMMA(E21:E52), E54 =0,25\*E52, E55=SUMMA(E53:E54) and other information you want in your invoice.



Print invoice and save as invoice in Document/Excel.

When you will create invoice 3002 you open invoice 3001, click Officebottom/Save as and save invoice 3001 even as invoice 3002.

Now you can safely change number of invoice, address of invoice, articles and last day for paying.

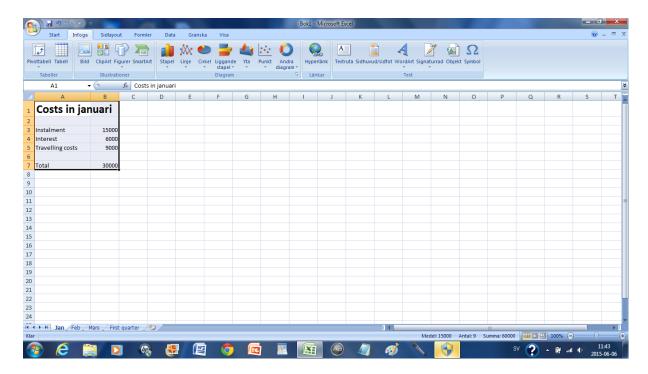
Check the new invoice and save it.

Repeat this exercise if you didn't think this was easy.

## Calculation of cost per month and creating 3 month compilation.

#### Costs first quarter

Click Officebottom/New/Empty/Create.



In lower part of screen you can see three flaps Page 1, Page 2 and Page 3.

Click right on one of these.

Click Insert/Calculation page/OK so there are four pages.

Click right on page to the left and choose Change name.

Change name to Jan..

Go on with the others so names are Jan, Feb, Mars, First quarter

Click flap Jan.

Write headlines and costs for instalments, interest, costs for traveling as in picture.

Make column A bigger to get room.

Calculate sum in B7 with Start/Edit/Sum.

Mark A1 to B7.

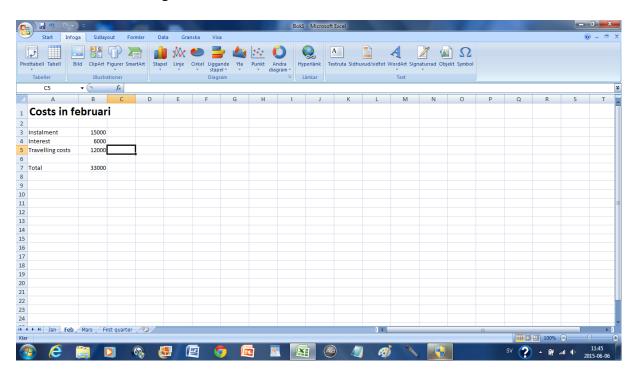
Click right in marked area and choose Copy.

Click Feb in lower part of screen.

Mark A1.

Click right and choose Past.

Change text in A1.



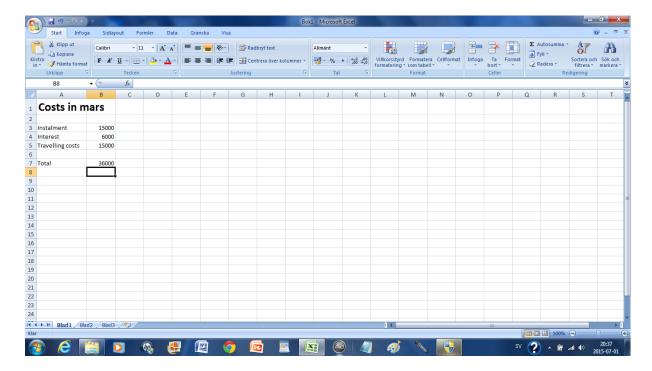
Write head lines and costs as in picture.

Increase with in column A.

Notice formula in B7 works if you change some of the costs.

Mark A1 to B7, click right and choose Copy.

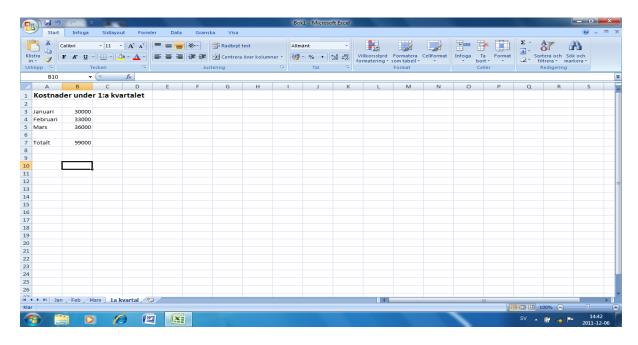
Click Mars.



Click right on A1 and Past.

Write head lines and costs as in picture.

Mark A1 to B7, click right and choose Copy. Click first quarter. Click right on A1 and Past



Change text but don't write sums.

Open page jan and copy totalsum to the right cell in first quarter.

As you see you don't get total sum in B3 but if you click suitcase and choose only value you get a better result.

Open page Feb.

Copy total sum to right cell in first quarter.

Click suitcase and mark only values.

Open page Mars.

Copy total sum to right cell in first quarter.

Click suitcase and choose only values.

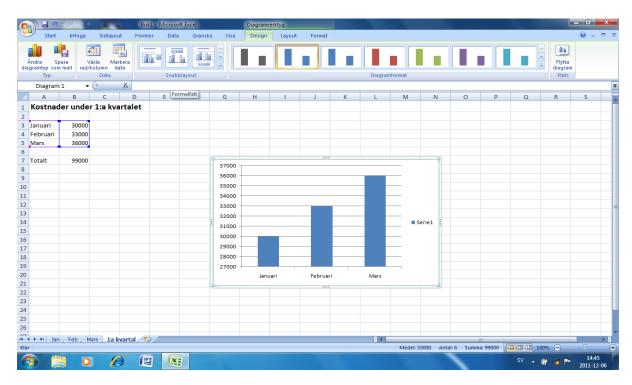
Mark B7 and click Start/Edit/Sum.

#### **Diagram**

Suppose you want a graphic picture to show the increase of costs which is for first quarter.

Mark A3 to B5.

Click Insert/Diagram/Pile/2D



Now you have got a diagram showing increase of costs for first quarter.

If you like to move diagram move cursor over frame of diagram and when cursor has four arrows you can move diagram.

You can change size by moving any side when cursor is double arrow.

You can mark diagram by clicking on it.

You can delete diagram with <Delete> when it is marked.

Check the diagram is not marked.

Click Officebottom/Print/Preview.

As you see you will print both calcyl and diagram.

Close Preview.

Mark diagram

.

Click Officebottom/Print/Preview.

As you see you are going to print only diagram.

Close Preview.

Save view of costs as costs first quarter in C:\User\Jan\My documents\Excel.

## Makro

Makro may be used in many different programs.

A makro can perform a number of pressing bottoms automaticly.

To make conclusion for first quarter 12 pressing bottoms were nesesserary.

Now you shall create a makro which do this. We will take small steps for security.

Click flap first quarter.

Delete sums for Januari, Februari, March and Total.

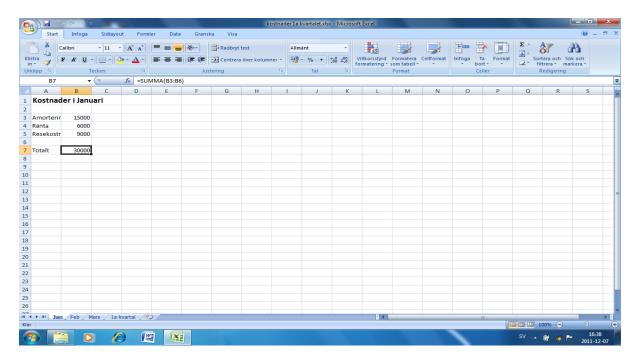
If you mark an area you can delete with <Delete>.

Check no cell is marked in calcyl.

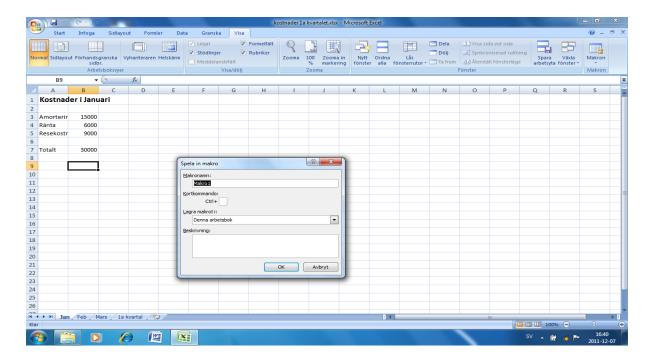
To name files, folders, passwords may sometimes be hard. If you use small letters and figures but not blanks and different symbols it probably works. If you name a makro with blanks it won't work.

### Makro jantofoerstakv

Open flap Jan.



Click Show/Makron and choose record makro.



Now you get a name for makro. Change this to jantofoerstakv.

Click OK.

Click right on B7 and choose Copy.

Click first quarter.

Click right on B3 and choose Past.

Click suitcase and mark Only value.

Click Show /Makro/Makro/Stop recording.

Delete sum for Januari.

Click flap Jan.

Click Show/Makros/Makro/Show makro.

Check makro jantofoerstakv is marked and click <Run>.

Check the makro works.

#### Makro febtofoerstaky

Click Feb.

Click Show/Makros and choose record makro.

You get suggestion to name. Change this to febtofoerstakv.

Click OK.

Click right on B7 and choose Copy.

Click first quarter.

Click right on B4 and choose Paste.

Click right on suitcase and choose only value.

Click Show/Makros/Makro/Stop recording.

Delete sum for Februari.

Click flap Feb.

Click Show/Makros/Makro/Show makro.

Make makro febtofoerstakv marked and click <Run> Check the makro works.

#### Makro marstofoerstaky

Click flap Mars.

Click Show/Makro and choose Record makro.

You get suggestion on name of makro. Change this to marstofoerstaky and click OK.

Click right on B7 and choose Copy.

Click first quarter.

Click right on B5 and choose Paste.

Click suitcase and choose Only values.

Click Makro/ Stop recording.

Deleete sum of Mars.

Click flap Mars.

Click Show/Makro/Makro/Show makro.

Check marstofoersta is marked and click <Run>

Check makro works.

#### Makro allatofoersta

Now we will try to create a makro performing all 12 pressing bottom.

Click flap first quarter.

Delete all sums.

Click flap Jan.

Click Show/Makron/start recording

Change name of makro to allatofoersta and click OK.

Click right on B7 and choose Copy.

Click flap first quarter.

Click right on B3 and choose Paste.

Click suitcase and mark Only values.

Click flap Feb.

Click right on B7 and choose Copy.

Click flap first quarter

Click right on B4 and choose Paste.

Click suitcase and mark Only values.

Click flap Mars

Click right on B7 and choose Copy.

Click flap first quarter.

Click right on B5 and choose Paste.

Click suitcase and mark Only values.

Click Show/Makro/Stop recording.

Delete all sums on flap first quarter.

Click flap Jan.

Click Show/Makros Show.

Check makro allatofoersta is marked and klick <Run>.

Check all sums are Ok

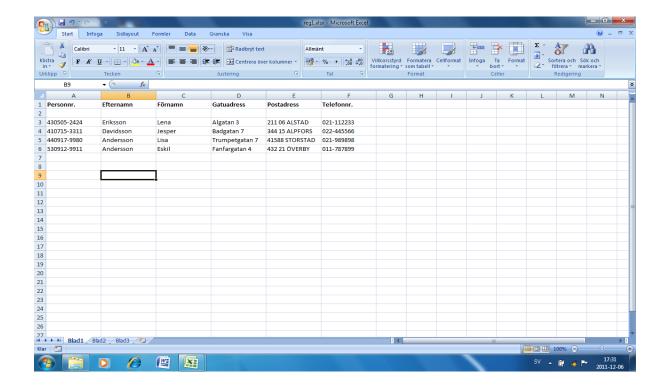
Repeat exercise if you didn't think this was simple.

## Handeling tables by Excel

Table, register is different names of the same thing a placing of persons, articles, cars, customers, suppliers and information about these.

If you need advanced handeling of registers there is in step 9.

Click Officebottom/New/Empty/Create and write this register.



Don't bother if columns are too small.

You can se column Postadress is the one which needs to be biggest space.

Mark column Postadress

Place cursor online between E and F so you a double arrow.

Drag line to the right so column with Postadress is big enough.

Click right in marked area and choose column with.

Suppose value is 16.

Mark all columns in register.

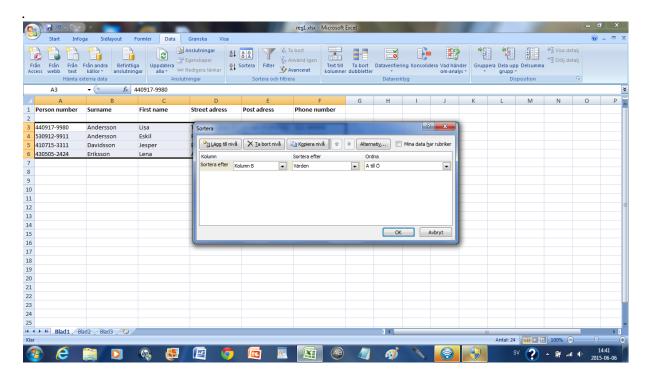
Click right in marked area and write value 16. Klicka OK.

Mark row with headline and click Start/Tecken/F-bottom for Bold.

Save register in C:\User\Lisa\My documents\Excel as reg1.

Mark A3 till F6.

Click Data/Sort.



Now you will sort after surname.

Keep adjustments as in picture.

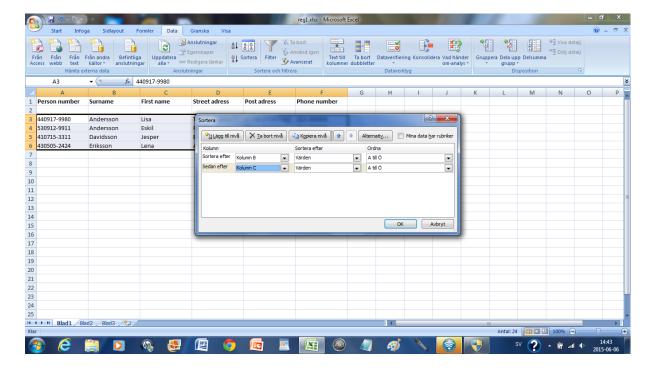
Click OK.

Sorting only on surname have been done because Andersson Lisa still is before Andersson Eskil.

Check register still is marked.

Click Data/Sortera.

Click <Add level> in dialogwindow.



Now sort register first by surname and second by first name.

Check adjustments are as on picture and click OK.

Check Andersson Eskil is before Andersson Lisa.

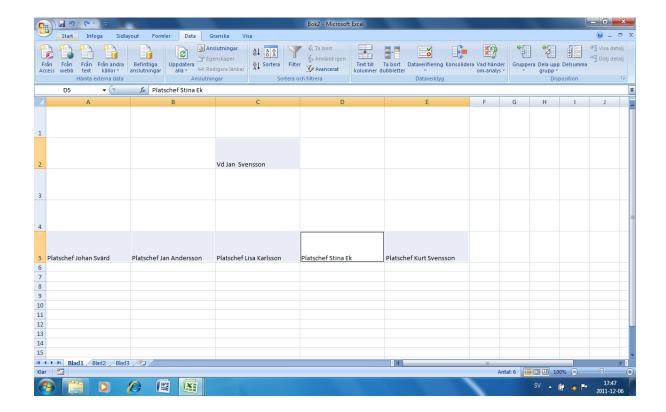
Close register by black cross without saving.

Repeat exercise if you didn't think this was simple.

## **Scedules in Excel**

Excel is suitable for different scedules.

Click Officebottom/New/Emty workbook/Create.



Suppose you want to create a scedule for organisations as above.

Scedule has 5x5=25 cells.

Mark 5 rows.

Click right in marked area and choose height of rows.

Write a value. (F.ex.50) and klick OK.

Mark 5 columns.

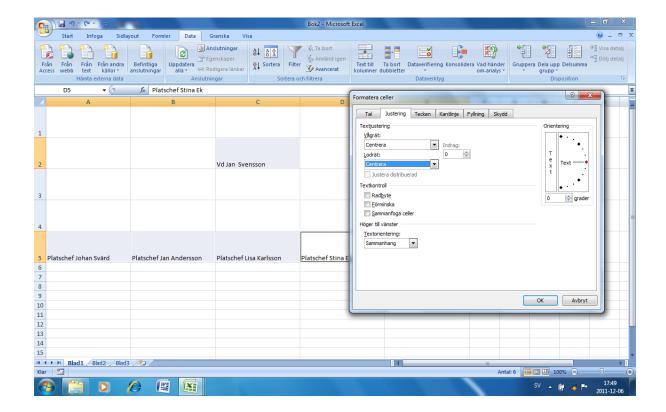
Click right in marked area and choose column with.

Write a suitable with (F.ex. 25) och klicka OK.

Write names in cells.

Mark all cells with names by pressing <Ctrl> and marking.

Click right in marked area and choose Format cells/Adjusting.

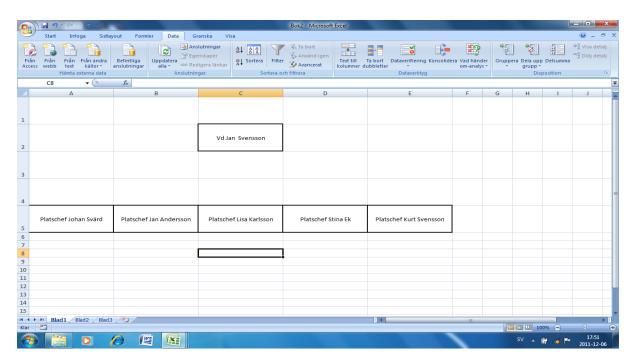


Click arrow down in square horizontal.

Mark center.

Click arrow down in square vertical.

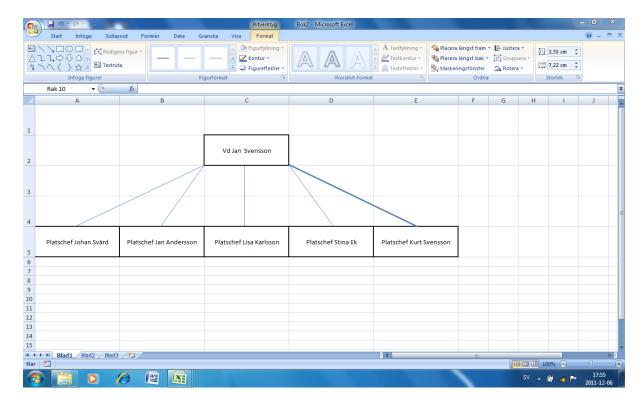
Mark center and click OK.



Click right in marked area.

Click bottom Fat edgeline.

Click Insert/Illustrations/Figures.



Click bottom with slash under headline lines.

At last draw lines between squares. You have to click line every time you are going to do a new line.

You can decide thickness of a marked line by clicking Format/Figureformat/Contour/Thickness and choose.

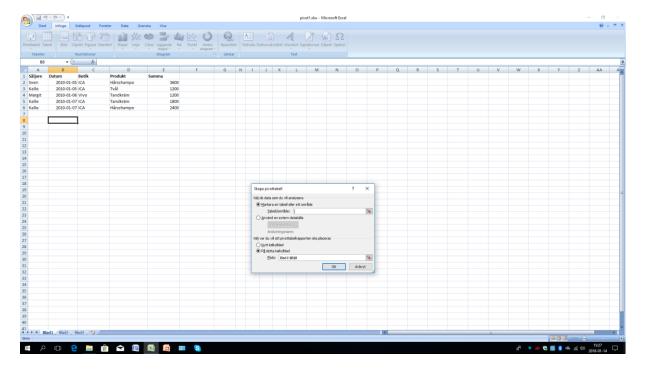
Save your scedule of organisation in Documents\Excel.

## **Pivottables**

Pivottabels are usable when you want to summerize lots of data. Suppose a company selling hygiene articles have Sven, Charlie and Margit as sellers and that they deliver statistic every day which is used for month reports. A small part of a daily report lpooks like this. Create this in Excel.

Säljare	Datum	Butik	Produkt	Summa
Sven	2010-01-05	ICA	Hårschampo	3600
Kalle	2010-01-05	ICA	Tvål	1200
Margit	2010-01-06	Vivo	Tandkräm	1200
Kalle	2010-01-07	ICA	Tandkräm	1800
Kalle	2010-01-07	ICA	Hårschampo	2400

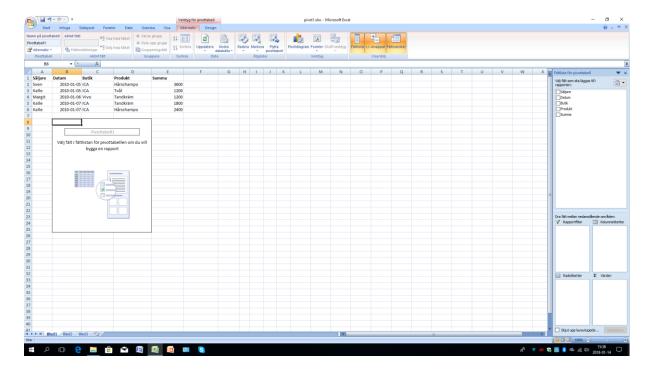
Click Insert/Pivottables/Pivottables



Mark the table A1:E7 and place for pivottable f.ex. C10

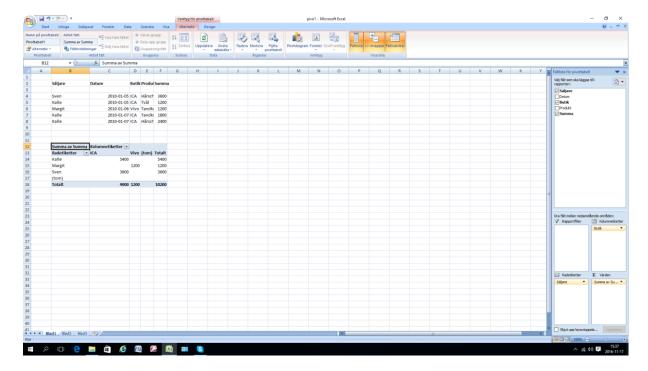
Click OK

Suppose you want to know sum of selling for everyone.



Drag seller in top square to rowheadline square below to the left

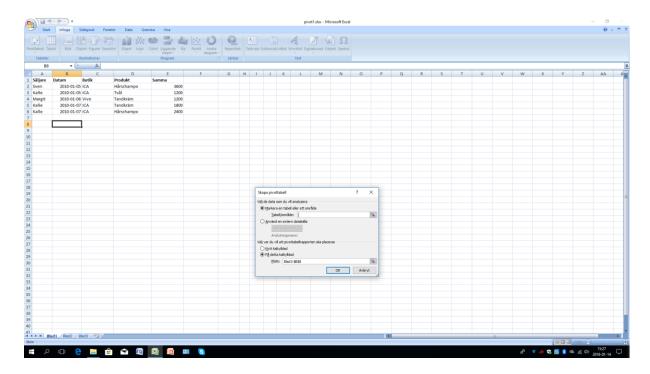
Drag sum to value square below to the right



Now you can see total selling is 10200 and sellig by Kalle is 5400

Delete summerize

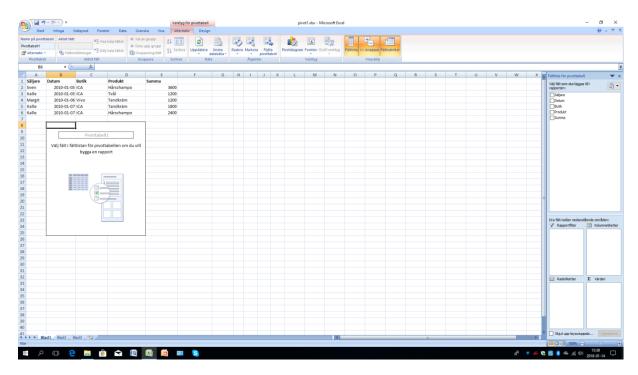
Click Insert/Pivottables/Pivottables



Mark whole table A1:E7 and place for pivottable f.ex. C10

Click OK

Suppose you want to know sum of bying by every store



Drag store in upper square to headline of row square down to the left.

Drag sum to value below to the right.

Now you know ICA has bought 9000 and Vivo 1200