

I have supplied you with an Excel worksheet, called hardware.xlsx.

1. **Open Access** and import the worksheet into a new database in Access. Check the box to link it to the source. The table does have column headings. Import the table, and call the table hardware.
2. Create a query that produces a list of the first names of the salespersons. In properties, make this list contain unique values.
3. Create a second table, Salespersons, and insert into it one row for each of the salespersons in the hardware table. For each salesperson in that table, create 4 fields: SalesID (a unique value which you must create; try initials and numbers, like NS14); firstname, lastname, and SalesToDate. Make firstname a lookup field; when creating the list of values, tell Access to get the names from the Query created in step 2. Also in the table, make SalesToDate have currency type.
4. Use the Lookup list to add the first names to the Salespersons table; then make up values for SalesID and lastname for each salesperson. Leave SalesToDate empty.
5. Create a relationship between the two tables, linking Salesperson to firstname.
6. Create a query using both tables that creates one row per salesperson, containing SalesID, Firstname, Lastname, and the total of Sales in SalesToDate. That means SalesToDate is a calculated field, getting its values from the Total of the Sales fields in the Hardware table. (In Query design, select Totals, and Sum for the Sales field.) Save the query as SalesBeforeChanges.
7. Put your name in Database Properties, name the database something like hwyourname.accdb: (that is, hwChao, hwAndrew), and **close the database**.
8. **Open Excel** and open hardware.xlsx. Sort the table at two levels: first by item Type, and then by Salesperson.
9. Change the values in the worksheet as follows: Add 5 to the number of hammers sold by each salesperson. Add 30 to the number of Electric saws sold by Alexei. Increase the Price of Pliers for each listing from \$1.25 to \$2. Save the worksheet.
10. Create a Pivot table in Excel that has as its row headings, Salesperson, as its column headings the item Type, and in each cell, the Sum of the Sales. Make it appear in a new Worksheet. Change the data type of the inner cells as currency. On the sheet tab, name the sheet PivotSales.
11. Under PivotTable tools, PivotTable options, Data tab, put a check next to "Refresh data when opening the file."
12. **Close Excel and open Access**. Create a CrossTab query with the same rows, columns, and fields as in Excel. That is, the row name is Salesperson, the Column heading is item Type, and the cells contain the Sales, summed. In Properties, make the data type of the Sales field and the Totals field currency. Save the query and name it.
13. Put your name in Worksheet Properties and close the worksheet.
14. **Email me the two files: hardware.xlsx and the Access database you created, with all the tables and queries.**

