

Information Workshop 2000 – Reinforcement Handout

What is a Database?

A database is an organized collection of data or facts relating to a specific topic. It is made up of fields and records.

Look at the database below, which was created to record the results of six students in a class.

Index No	Name	Date of Birth	Average Marks	Result
1125	Ali	12-12-1985	81	PASS
1126	Asad	12-06-1985	78	PASS
1127	Umer	31-12-1985	95	PASS
1128	Ashraf	23-08-1985	40	FAIL
1129	Kashif	11-07-1985	77	PASS
1130	Iqbal	16-03-1985	93	PASS

A Field

Each item of data, or column in a database, is called a field. In the above table there are five fields: Index No, Name, Date of Birth, Average Mark and Result.

A Record

Each row in a database is called a Record. The above table contains six records. This is Ali's record.

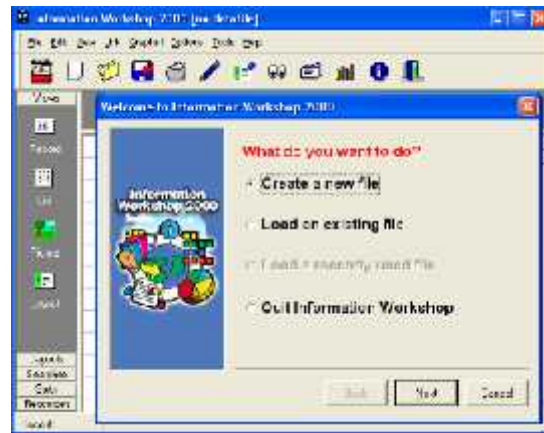
1125	Ali	12-12-1985	81	PASS
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Using Information Workshop 2000

Let's learn to work with databases using Information Workshop 2000. To load Information Workshop 2000, follow these steps:

Start -> Programs -> BlackCat -> Information Workshop 2000

You will then see a screen similar to the one given below.



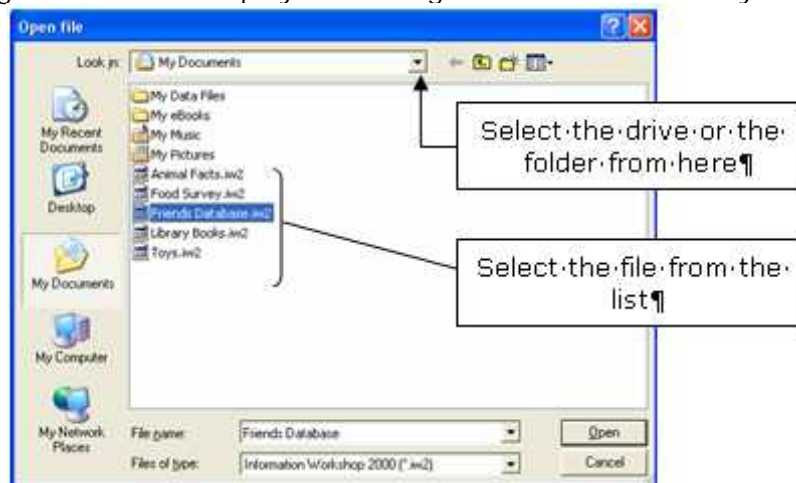
The small window that appears will have a few options. You should select an option according to the task you want to do.

- Create a new file
- Load an existing file
- Load a recently used file
- Quit Information Workshop

Working with an Existing File

Load an existing file option lets you work with a database that has been created already.

- Select Load an existing file from the first dialogue box which appears soon after you load Information Workshop 2000.
- Click on the Next button.
- A dialogue box will be displayed showing a list of files saved in your computer.

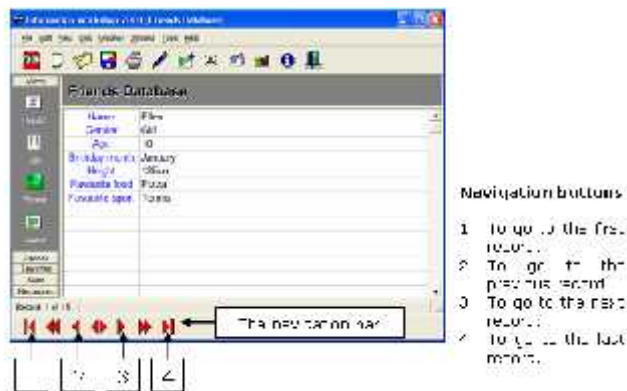


- Select the file that you want to work with and click on the Open button.

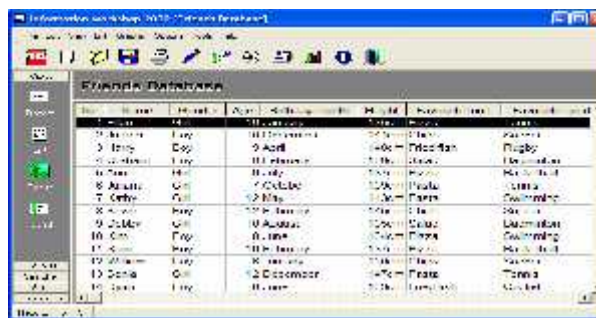
You will then see a window opening up with a brief description of the file that you are going to open. Click on the OK button.



Information Workshop will then display the first record of the opened database on the screen.



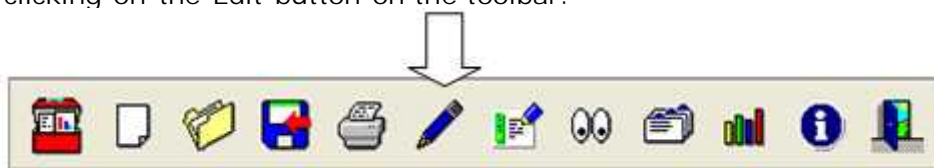
The navigation bar can be used to navigate through the records of the data table. To view all records at once or to see all records in a table format select List from the View menu.



List view in Information Workshop 2000

Editing and Adding Records

If you want to make any changes to the existing records, you must activate the edit mode by clicking on the Edit button on the toolbar.



Information Workshop will then show the highlighted data items with the cursor, for you to edit the existing details.

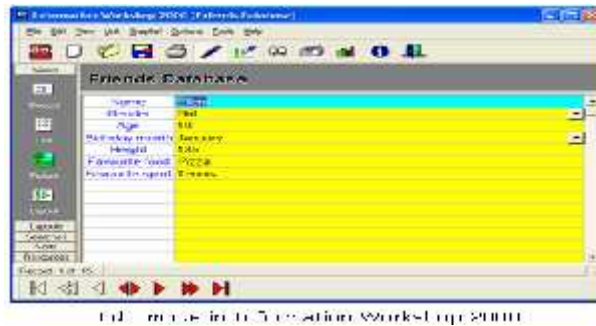
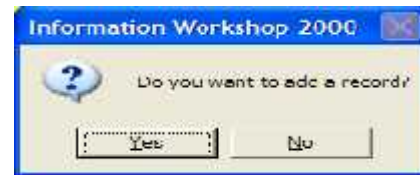


Figure 1: Information Workshop 2000

Adding New Records

New records can be added to an existing database in the following way.

- Select Add Record from the Edit menu.
- Enter the data into the relevant fields.
- When you finish entering a record fully, press the Enter key.
- You will then be prompted with a message as shown below:

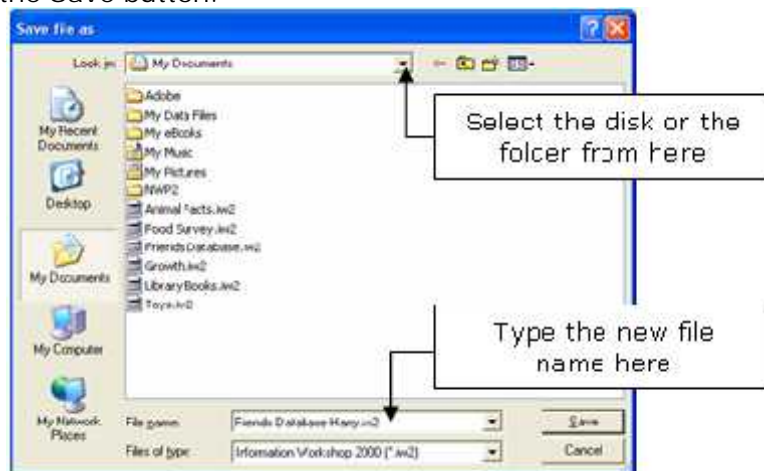


- If there is another record to be added click on Yes, otherwise click on No.

Saving a Database

If you want to save an existing database with a different file name:

- Select Save as from the File menu.
- Select a place (disk and folder) where you wish to save your file.
- Type a new name for your database.
- Click on the Save button.

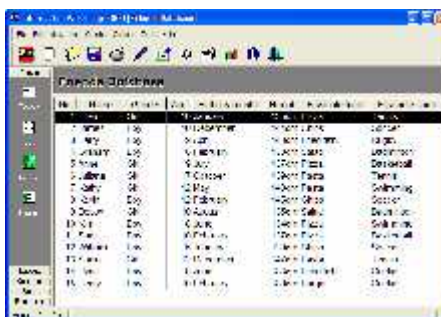


However, if you wish to save the changes you made to the existing database, using the same file name and in the same location, select Save from the File menu, or click on the Save button on the toolbar.

Sorting Records

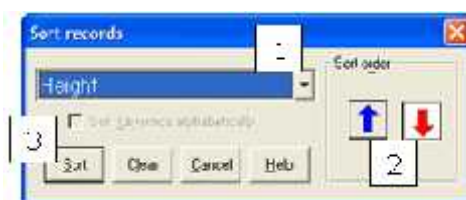
Sorting records means arranging data in a particular order. You can sort data in a table in either ascending or descending order.

Let's now see how we can sort data entered into a table in Information Workshop 2000. Make sure you have opened the table before you start sorting records.



We are going to sort the Height field in descending order so that the tallest person's record will appear as the first record of the table.

- Select Sort from the View menu. A small dialogue box will appear on the screen.



- Select the field that you want to sort from the list. 1
- Click on the appropriate sorting order button (Ascending or Descending). 2
- Click on the Sort button. 3

The records in the table will be sorted in descending order of the height. You will see the tallest person's record in the top row of the data table.



Data can be sorted in alphabetical order too. For example the above table can be sorted in alphabetical order of Name.



Searching Records

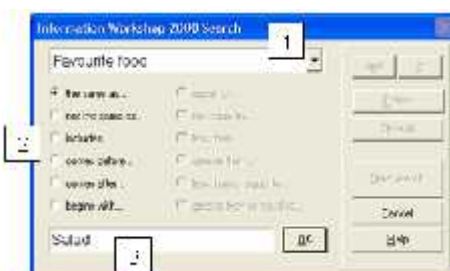
The search facility is used to search the file to find particular records. This is very useful when your data table contains lots of records, as it would be difficult and time-consuming to go through them record by record to find a particular one.

The search facility in database packages requires the user to enter a search condition. It then searches for records that satisfy the given condition and displays them on the screen.

Let's now learn about searching records in Information Workshop 2000 using the same data table we have used throughout this chapter. For example, search for the records of friends whose favorite food is salad.

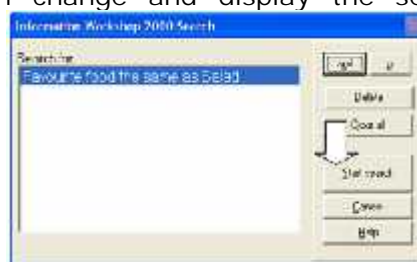
- Select Search from the View menu.

You will then see the following dialogue box on the screen.



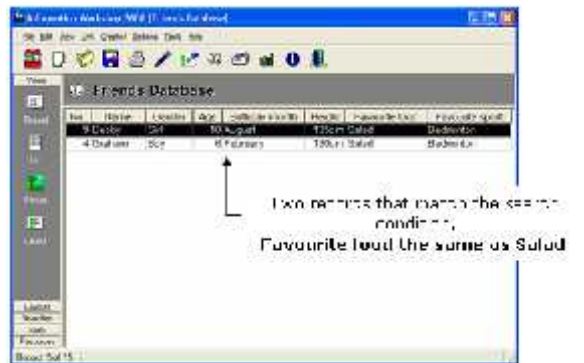
- Select the field that your search is based on. 1
- Select the condition. 2
- Type the information to search for. 3
- Click OK.

The dialogue box will then change and display the search condition.



- Click on the Start search button.

Information Workshop 2000 will then tell you how many records match your search condition. If there are any records that match the condition you have given, the program will display them on the screen.

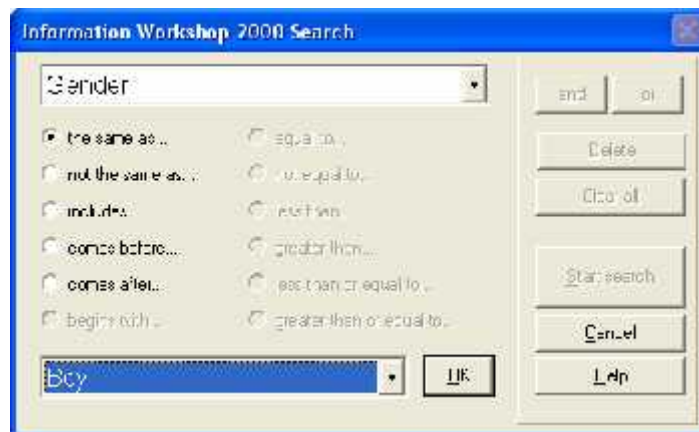


Sometimes a search condition can be more complex. For example, assume that you want to search for records with the following two conditions:

“Gender the same as Boy, and Age greater than 8”

Let's see how we can search records according to the above conditions.

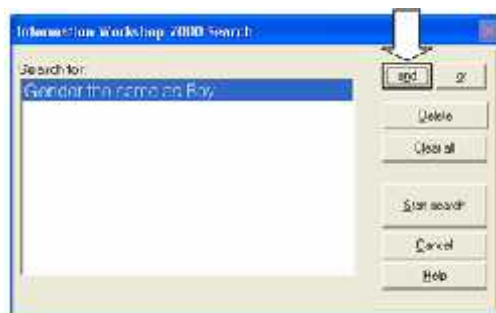
- Select Search from the View menu and set the first search condition.



First search condition - Gender the same as Boy

- Click on the OK button.

The dialogue box will then change and display the first search condition.



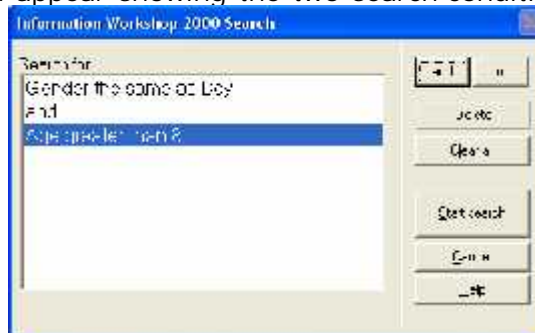
- Click on the and button.
- Set the second search condition in the box that appears.



Second search condition – Age greater than 8

- Click on the OK button.

A dialogue box will then appear showing the two search conditions.



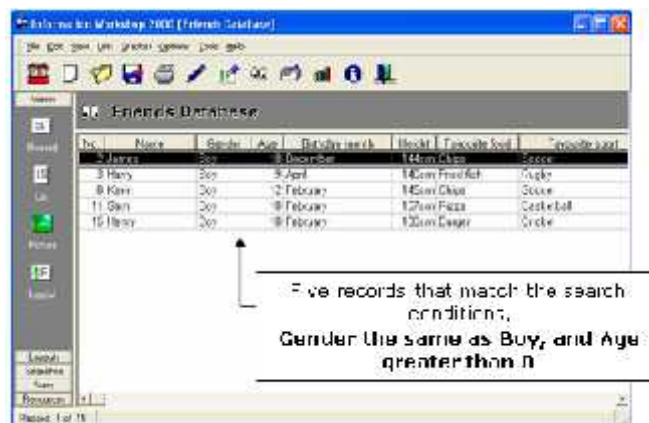
Search conditions

Gender the same as Boy, and Age greater than 8

- Click on the Start search button.

Information Workshop 2000 will then search the table for the records that match the given conditions and display the records on the screen.

Databases



Printing

Data tables and graphs can be printed using the print facility available in database packages.

When printing data tables it is wise to check the print preview before you actually print the table as sometimes the entire table may not fit into one page.

To obtain the print preview:

- Go to the File menu.
- Select Print preview.

You can also change the page orientation using the Print setup option available in the File menu of Information Workshop 2000. The landscape mode is suitable when printing data tables with many fields.

You can print your data tables with suitable headings at the top. This will make your tables more informative.

To add a header to your printout:

- Select Printout Header from the File menu.
- Then type a suitable heading in the box that appears.



- Finally click on OK.
- After providing a printout header you can print the table using the Print option from the File menu or by clicking the Print button on the toolbar.

Days remaining in years

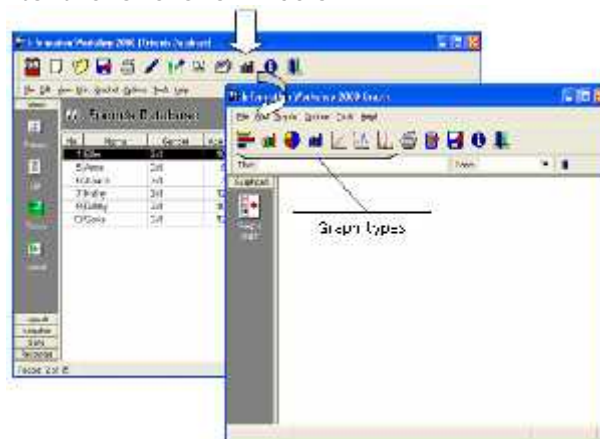
No.	Name	Gender	Age	Birth day/month	Height	Favourite food	Favourite sport
2	James	Boy	10	December	140cm	Chips	Cricket
5	Hany	Boy	8	April	140cm	Fish & Beef	Football
8	Karthi	Boy	2	February	145cm	Chicken	Swimming
11	Sahil	Boy	7	February	130cm	Ice-cream	Badminton
15	Honey	Boy	10	February	130cm	Curry	Cricket

Graphs

A graph is a very useful tool for displaying data in a pictorial manner, which is easier to understand and analyze. Most database packages allow users to prepare graphs based on data available in tables.

Let's learn how to create a graph using the data obtained from the search condition 'gender the same as girl'.

- Click on the Graph button on the toolbar. A new window will then open up on the screen similar to the one shown below.



- Select a suitable graph type by clicking on the appropriate button on the graph toolbar. Type of graph should be decided carefully as some of the graph types will not be suitable to display the selected data set properly.
- You will then be prompted with a dialogue box where you have to choose the fields for the graph.

Generally, for bar graphs and line graphs you will have to choose two fields. If you are going to prepare a pie chart you will have to choose one field only.

For example, we are going to prepare a bar graph to show the age of each girl. Therefore we need to choose Name as the first field and the Age as the second field.

- Click on the OK button.
- Add a suitable chart title. Select Titles from the Edit menu. Type in a suitable title and labels for the graph.

