

# Get started with... Base

Storing data is easy, but searching it always used to be hard. However, now you've got OpenOffice.org Base on your side...

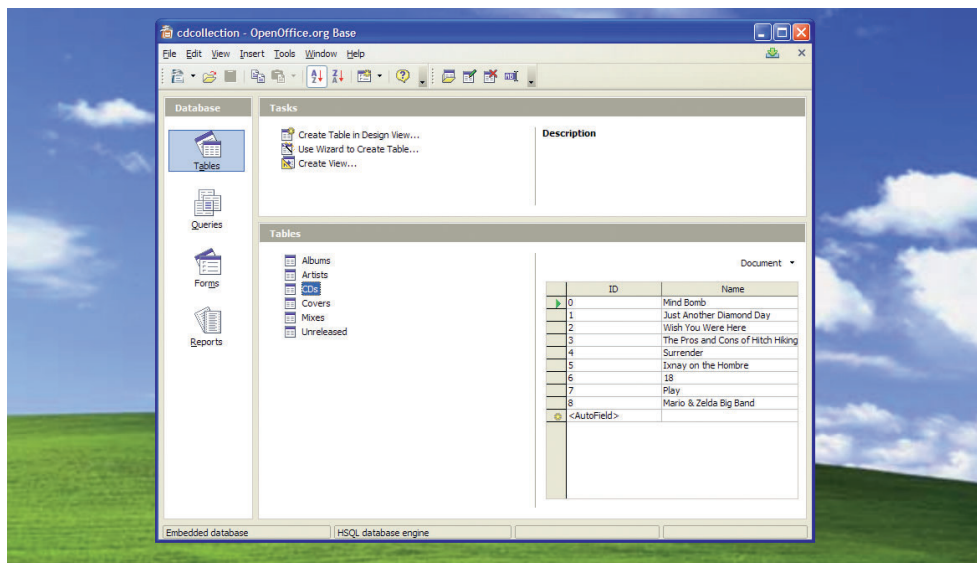
Everyone has lots of information to keep track off: phone numbers on your mobile phone, addresses in a notebook, events in a diary, shopping lists on paper stuck to your fridge, and so on – wouldn't it be nice to have all that information in one place? Wouldn't it be nice to make it searchable, so that you can type in a few key words and pull up matching information? Well, that's what *Base* offers to do for you: it's a database program that stores information and makes it easy to find.

In this tutorial you'll learn how to create a CD database using *Base*, which means you'll learn what databases and tables are, how to create them to fit your needs, and how to enter data. As you follow this tutorial, customise it to fit your needs – if you collect DVDs, stamps, spoons, or whatever, just change "CDs" for your type of collection!

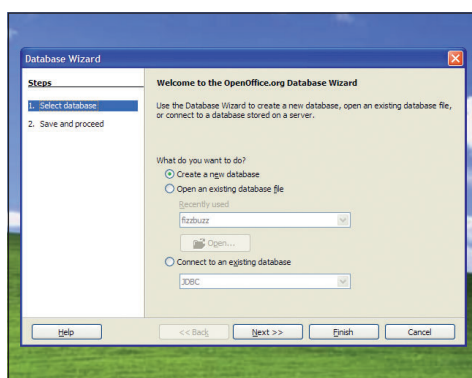
Before we start, there are a few basic things you need to know:

- 1 Databases have lots of jargon that can be a bit confusing at first. If this is your first time using a database, don't worry – it will all make sense!
- 2 When working with a database, sometimes your changes are saved automatically. This is very important: think changes through before you make them, because the Undo might not help you much!
- 3 One database in *Base* can hold many tables, as well as user interfaces to read from them and reports to make them print nicely. To give all these to someone else, you just need to give them one file.
- 4 *Base* is capable of connecting to bigger, more complicated databases that run on servers – if you want to try that after understanding the basics, turn to p122 and follow the project there.

If you have some experience with *Microsoft Access*, much of *Base* will look familiar to you, but we'd still advise you to take your time when following through this tutorial. At the very least, take a backup of your database before making any changes, just in case *Base* works a little differently to *Access*!

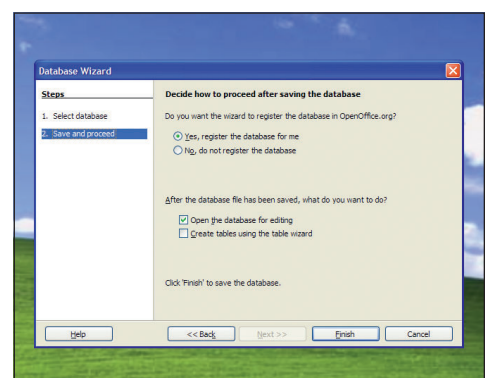


If you're already a database adept, check out our scripting tutorials starting on p76.



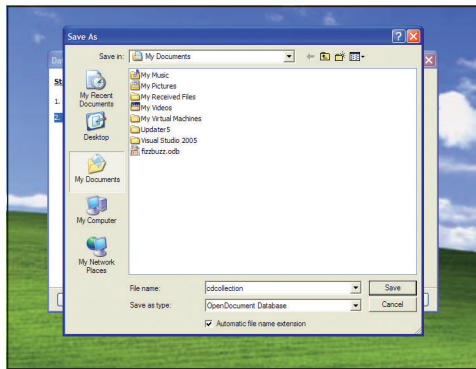
## 1 Database wizard

When you start *Base*, the database wizard will automatically run. This lets you create a new local database (the default option), open one you created before, or connect to a database. That last option is for advanced users who want to connect to servers – just click Next for now.



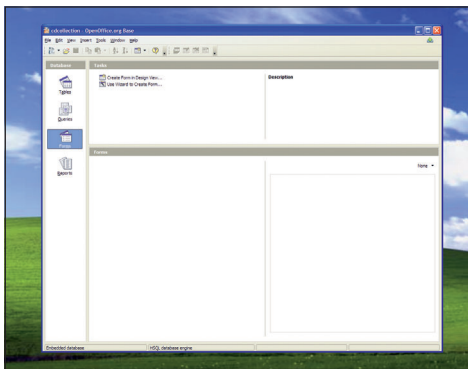
## 2 Table design

This screen is pretty superfluous for beginners: if this is your first time running *Base*, just click Finish. However, if you have used *Base* before and want to get straight to designing your tables, click the Create Tables Using Table Wizard option first. We'll just go with the first option – click Finish.



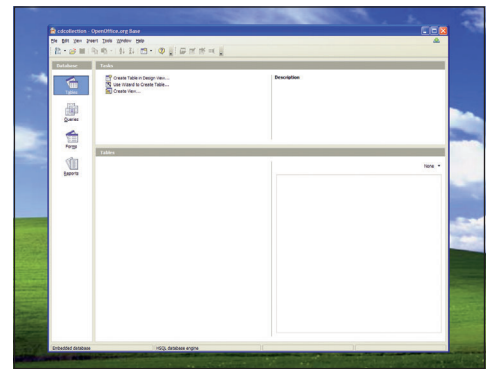
### 3 OpenDocument format

All databases in *Base* are actually just files, so they need to be stored somewhere on your computer. In common with the other *OpenOffice.org* applications, *Base* uses OpenDocument format by default. Save your database as **cdcollection** in your documents folder.



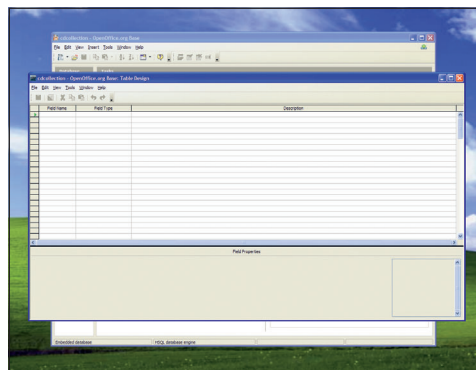
### 4 Start work

And now you're in – **Base** has created the database and you're ready to start working. Along the side are the four main views: Tables, Queries, Forms and Reports. Tables are where all your data is stored, so click that tab now.



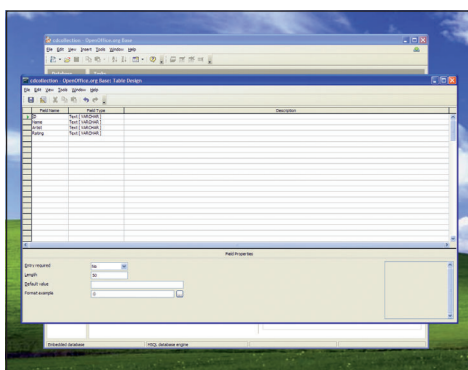
### 5 Ignore wizard

In the Table tab there are three links at the top that are important: Create Table In Design View, Use Wizard to Create Table, Create View. The second option might sound easier, but it's a bit long-winded – just click Create Table In Design View for now.



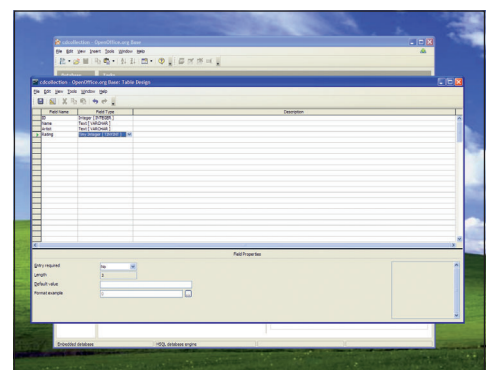
### 6 Table design views

This is the table design view. It's split into three columns: the name of your fields, the type of data they hold, and their description (you can ignore that last one). Field names are things like First Name, Address, etc.



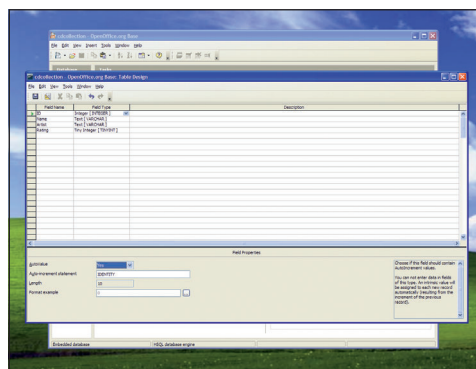
### 7 First four fields

Type these names into the first four fields: ID, Name, Artist and Rating. By default, *Base* will set these to have the TEXT [VARCHAR] data type, which means it holds variable-length text. That is, Name could hold "Hello" or "Supercalifragilistic-expialidocious".



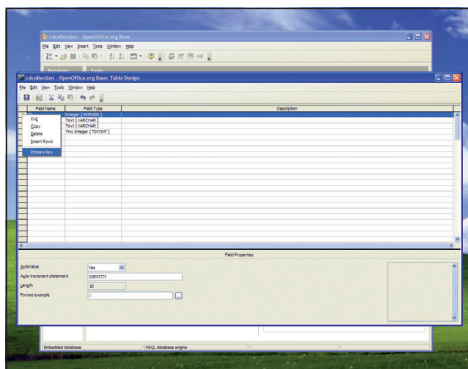
### 8 Set Integer

Click the field type for ID and set it to Integer [INTEGER]. This holds whole numbers, such as 3, 9 and 349083439. Change Rating to be Tiny Integer [INTEGER]. This holds whole numbers up to 127.



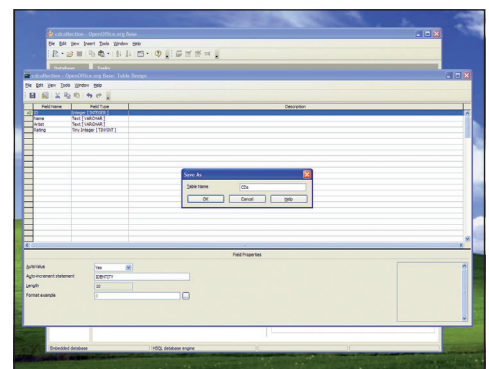
### 9 Unique numbering

That ID field will hold a number that's unique to every CD we add to this collection, so we don't really want to enter it ourselves. So click that field, then look at the boxes of the bottom – change the AutoValue value from No to Yes.



### 10 Primary key

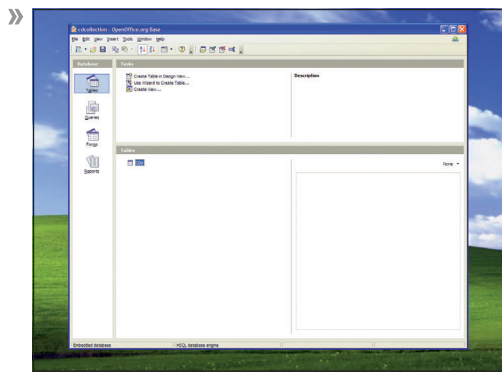
Every table should have a 'primary key' which is a unique value that identifies a row. For example, if you have two versions of the same album, the primary key lets specify exactly which one you mean. Fortunately, our ID value is exactly this, so right-click on the green triangle next to the ID field and click Primary Key.



### 11 Name your table

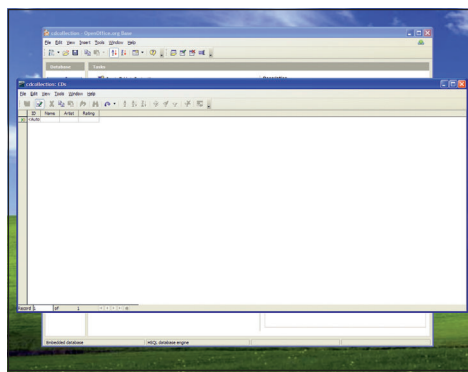
That's your table design done, so click the little disk in the toolbar to save your work. This prompts you to give your table a name within the database, so enter "CDs", then click OK. Note: this is not a filename – it's just internal to your database.

# Base: the basics



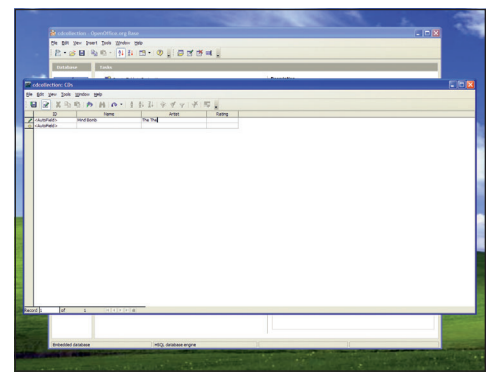
## 12 Save table

When your table is saved, you can just close the design window to get back to the main Impress window from earlier. Except now you'll see your CDs table listed under the Tables pane. Double-click that to open it up for editing.



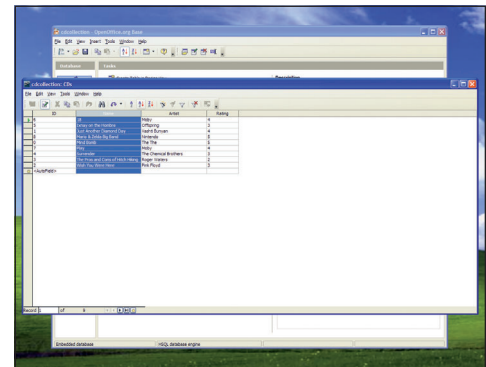
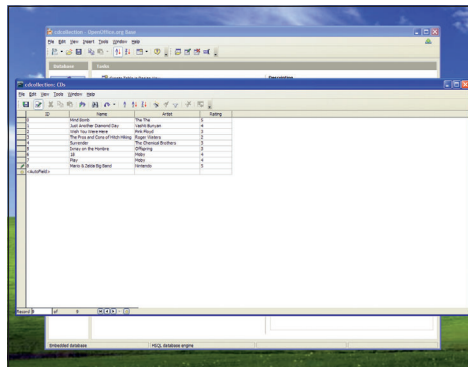
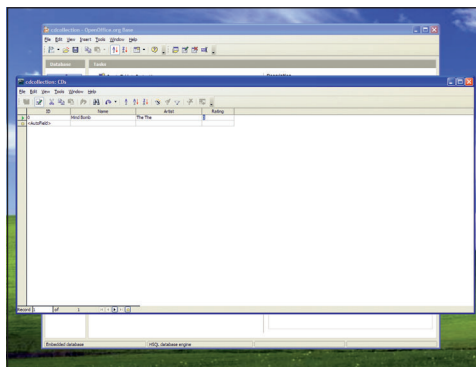
## 13 Table editing view

This is the table editing view, which lets you type data into your CDs table. You can resize the columns at the top to make them bigger and easier to work with, which is particularly helpful if you want to type a lot into your fields.



## 14 New row

Type "Mind Bomb" into the Name field for the first row, then "The The" into Artist. Notice that Base has <AutoField> in the ID row, because that takes care of itself. You'll also notice that it automatically creates a new row for you, so you can add more fields easily.



## 15 Save value

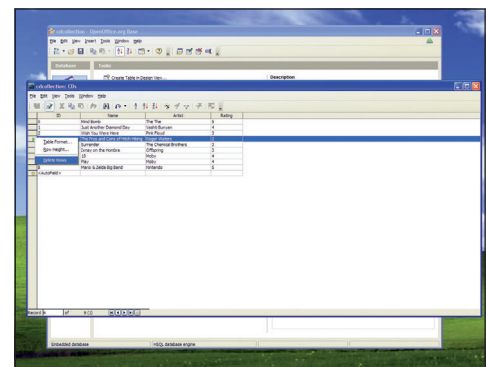
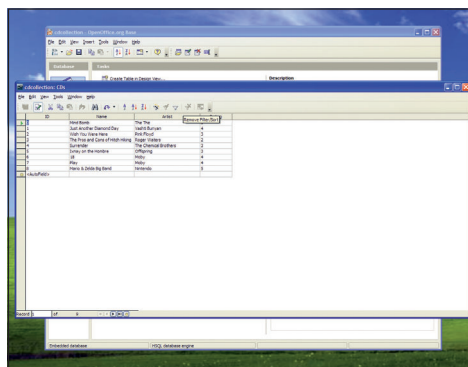
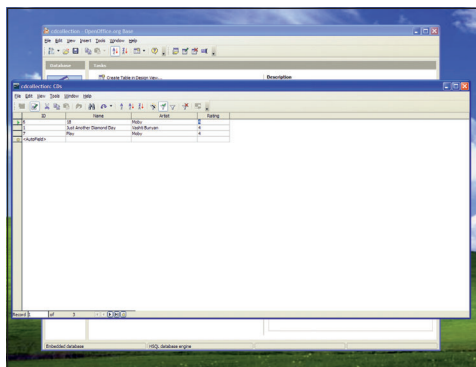
Now try entering "Fizz" for the rating for this CD. Once you press Enter to save the value, Base will automatically change that "Fizz" to be 0. This is because we told Base to accept a Tiny Integer value, which means it only accepts numbers -127 to 127 – not text.

## 16 Enter more data

Go ahead and type a few more fields in there so that we have something to work with. Make sure you have at least two CDs with the same rating, because we'll be using that shortly. Remember, the ID number takes care of itself – you only need to fill in the Name, Artist and Rating fields.

## 17 Sort it out!

Once you've added all your data, select the Name field (do this by clicking the title "Name" above the first row), then click the toolbar button that shows an A over a Z with a down-pointing arrow. This sorts the table alphabetically by the name of the CD.



## 18 AutoFilter

Now try clicking on one of the ratings. For example, I gave Moby's *Play* album 4/5, so I would click on the 4 in his row. Now click the toolbar icon marked with a funnel and a magic wand – this is the AutoFilter button. This filters by the current selection, so you'll only see CDs with a 4/5 rating.

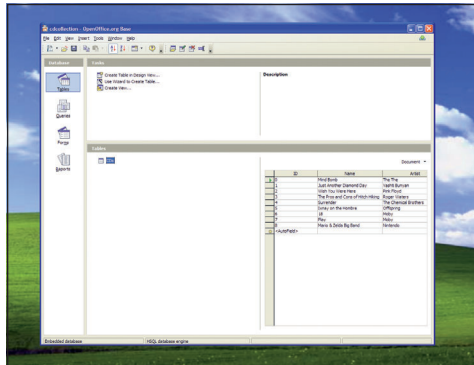
## 19 Hidden rows

Don't worry – the other rows are just hidden, rather than being deleted! If you want to get back to the original view of your table, which means removing any filter or sorting, you can click the button that shows a picture of a filter with a cross over it.

## 20 Deleting forever... careful!

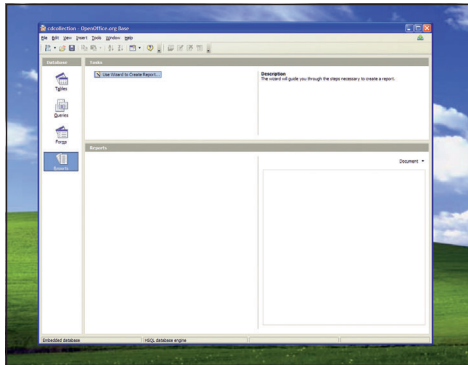
If there's a row you don't want, you can delete it by right-clicking on the grey bar on its left and choosing Delete Rows. Remember, deleting a row is permanent: once it's deleted, it's gone forever!





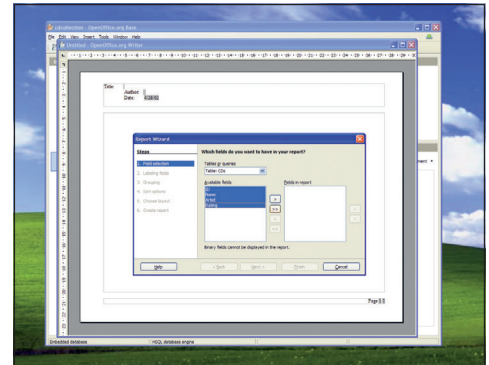
### 21 Back to main

When you're done editing your table, close the window and you'll be back to the main *Base* window. To the right of the table list, you'll see the word "None" – click the arrow next to it, then choose Document. This gives you a quick preview of the data in the selected table.



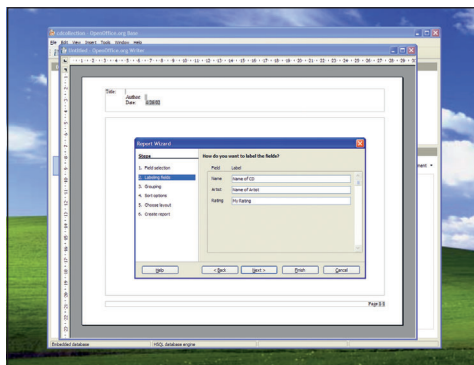
### 22 Create report

Now let's create a way to print off your CD collection quickly. This is best done using a report, which is a neatly formatted version of your table. So click the Reports tab, then look for the button at the top marked Use Wizard to Create Report.



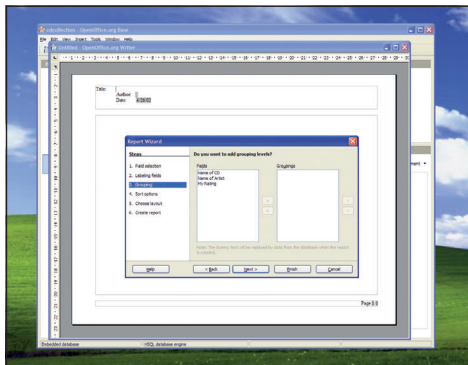
### 23 Rate my CDs

From the window that appears, choose the Name, Artist and Rating fields from your CDs table, then click the > button. This adds all the fields to the report, meaning that you want them all be shown. If you want to add all the fields, just click >>.



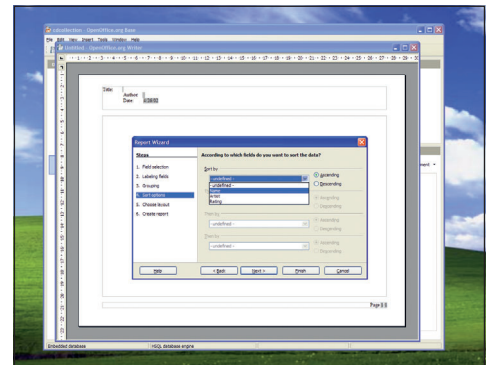
### 24 Now it's personal!

The next screen lets you choose how the fields are named in the report. For example, you might want your Rating field to be marked as "My Personal Rating". This is more important if you have field names like LineManagerName that look bad when printed out.



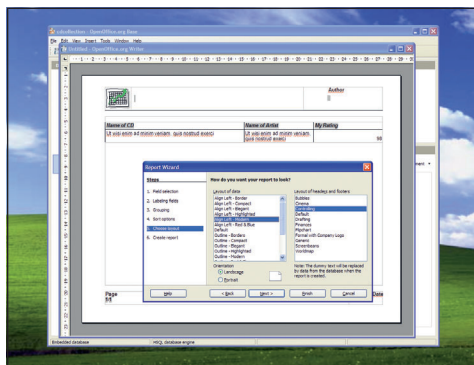
### 25 Grouping levels

When you click Next you can add grouping levels to your report, which is helpful if you have categories in your table. For example, if we had a "Type" field so that we categorised CDs as pop, hip hop, rock, etc, that would be a good grouping level. But for now, just click Next.



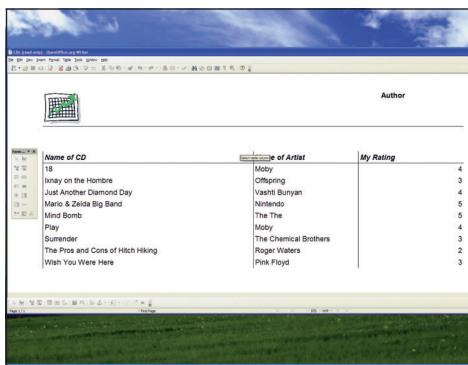
### 26 Order, order!

This next screen is important: it lets you choose how the CDs in your report should be ordered. As with the table sorts, this doesn't actually change the order of your rows, but it makes your report a lot more useful! Tell Base to sort by Name, then click Next.



### 27 Grand designs

Now you get to choose how your report ought to look. The default layouts aren't great, but that's OK – having a complicated design for a report just makes the information look cluttered! Choose something simple, then click Finish.



### 28 And finally!

That's it – your report is done! You'll see that it pulls your data straight from your table, then reformats it using your report style so that it looks more attractive. You can now print the report out, and relax: your CD collection is perfectly organised. **LXF**

