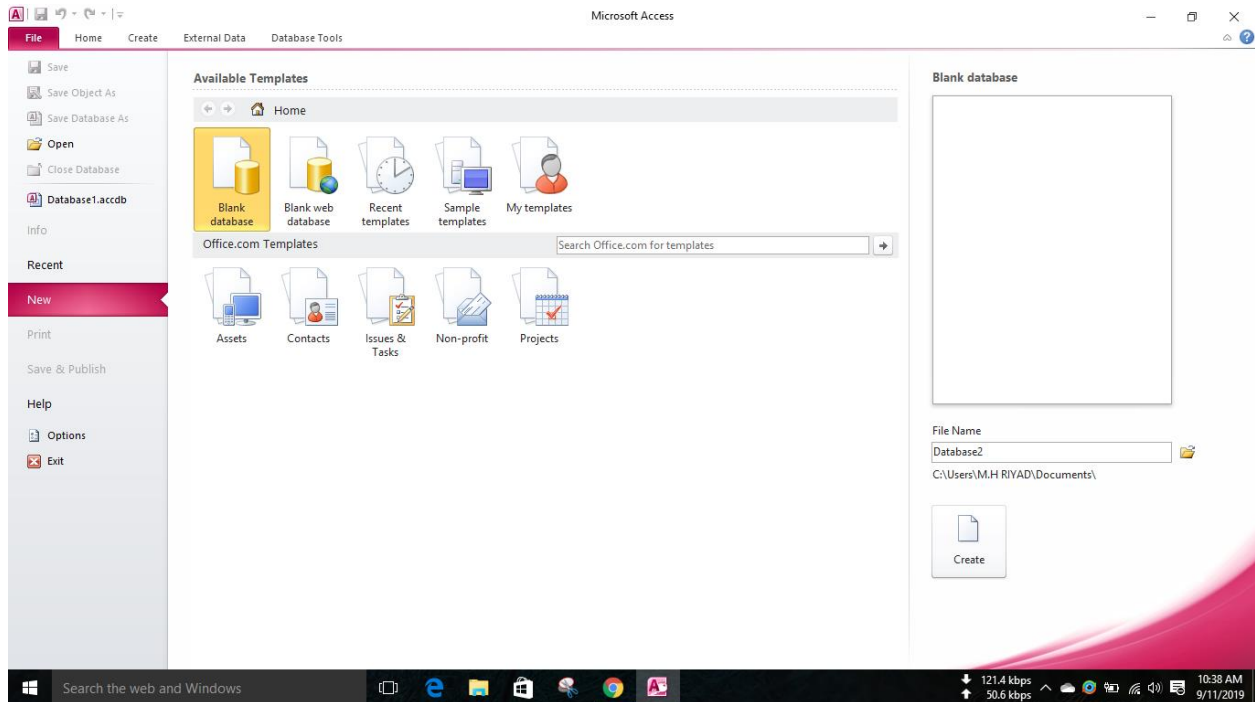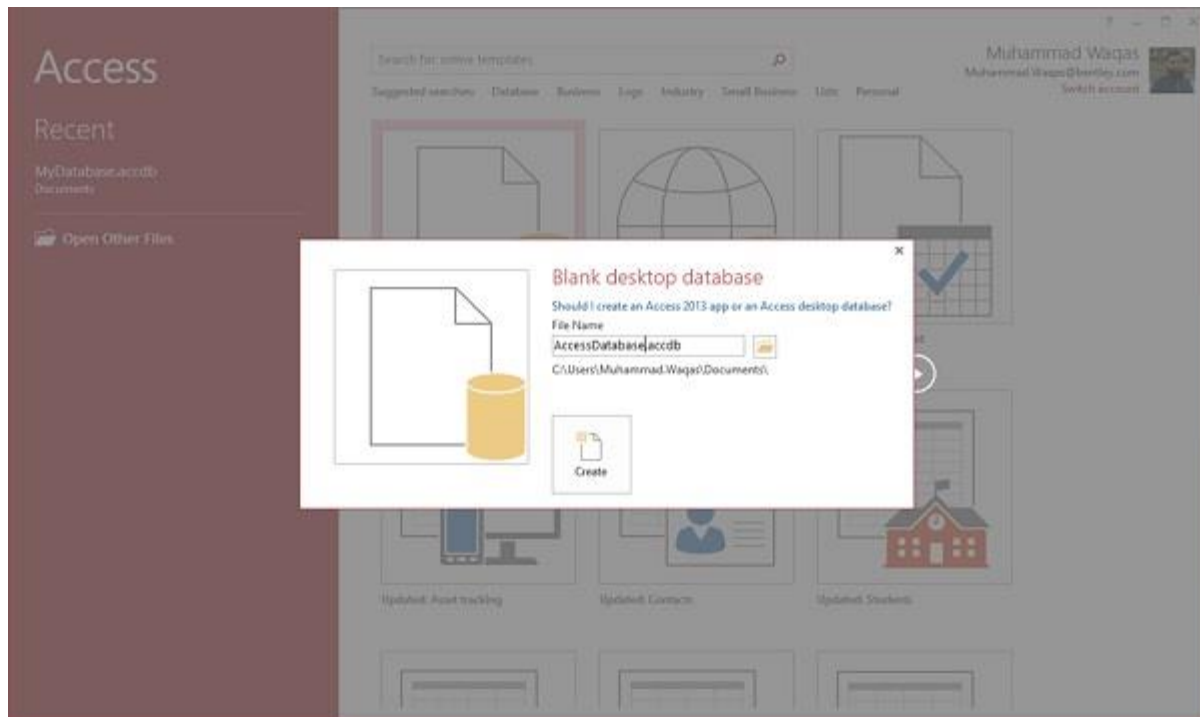# Create Blank Database

Sometimes database requirements can be so specific that using and modifying the existing templates requires more work than just creating a database from scratch. In such case, we make use of blank database.

Step 1 − Let us now start by opening MS Access.

**Step 2** − Select Blank desktop database. Enter the name and click the Create button.

Step 3 − Access will create a new blank database and will open up the table which is also completely blank.
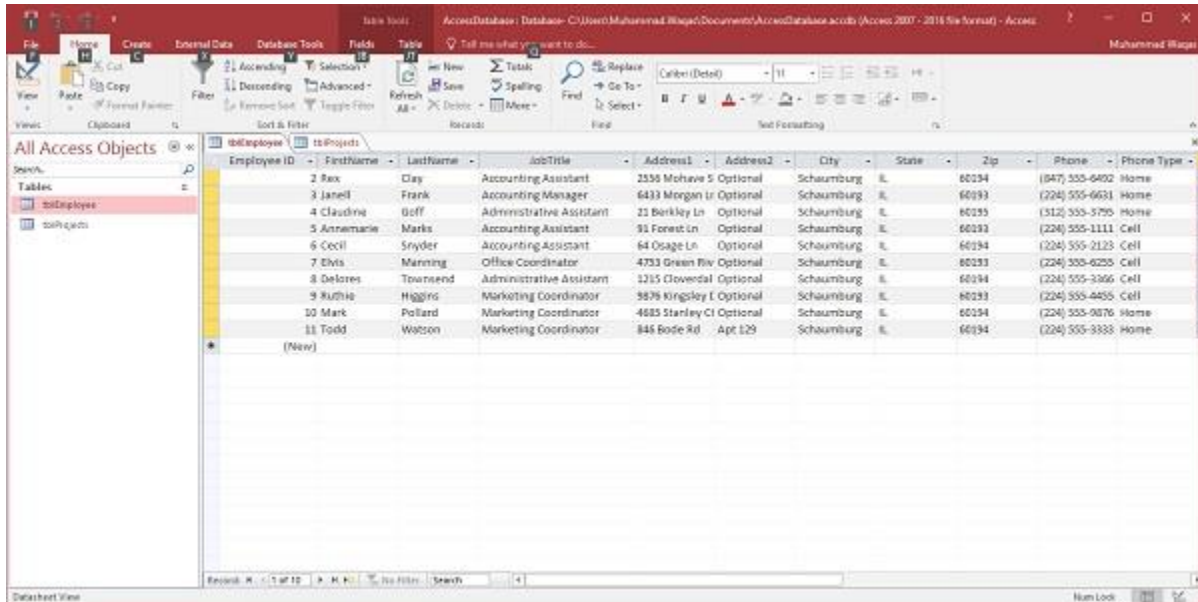
Data Insert

An Access database is not a file in the same sense as a Microsoft Office Word document or a Microsoft Office PowerPoint are. Instead, an Access database is a collection of objects like tables, forms, reports, queries etc. that must work together for a database to function properly. We have now created two tables with all of the fields and field properties necessary in our database. To view, change, insert, or delete data in a table within Access, you can use the table's Datasheet View.

- A datasheet is a simple way to look at your data in rows and columns without any special formatting.

- Whenever you create a new web table, Access automatically creates two views that you can start using immediately for data entry.

- A table open in Datasheet View resembles an Excel worksheet, and you can type or paste data into one or more fields.

- You do not need to explicitly save your data. Access commits your changes to the table when you move the cursor to a new field in the same row, or when you move the cursor to another row.

- By default, the fields in an Access database are set to accept a specific type of data, such as text or numbers. You must enter the type of data that the field is set to accept. If you don't, Access displays an error message −

Let us add some data into your tables by opening the Access database we have created.
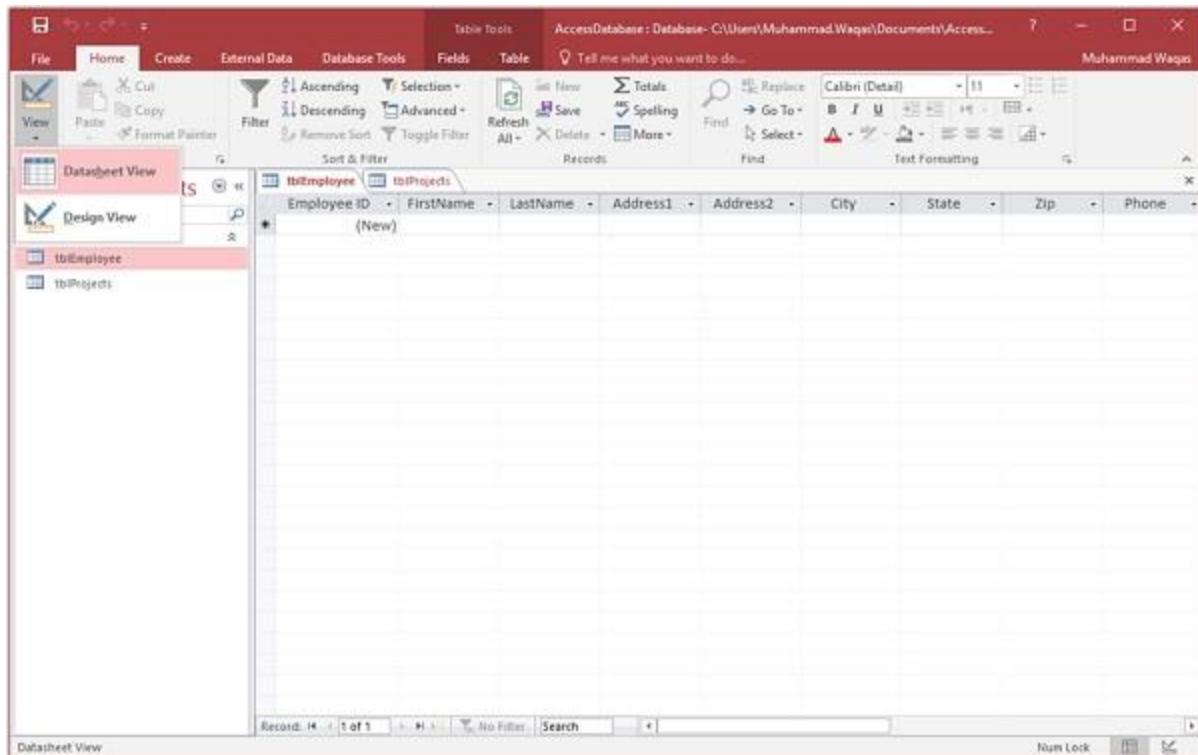
Select the **Views** → **Datasheet** View option in the ribbon and add some data as shown in the following screenshot.

Similarly, add some data in the second table as well as shown in the following screenshot.

You can now see that inserting a new data and updating the existing data is very simple in Datasheet View as working in spreadsheet. But if you want to delete any data you need to select the entire row first as shown in the following screenshot.

Now press the delete button. This will display the confirmation message.
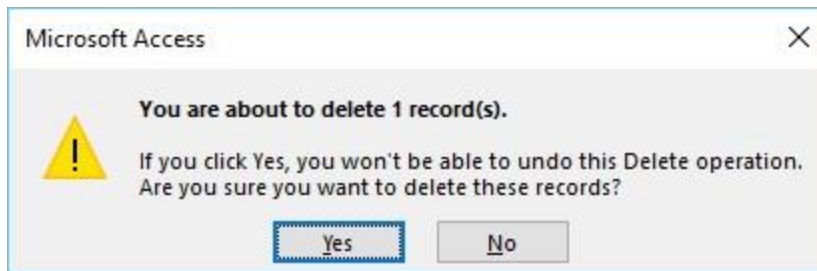
Click **Yes** and you will see that the selected record is deleted now.
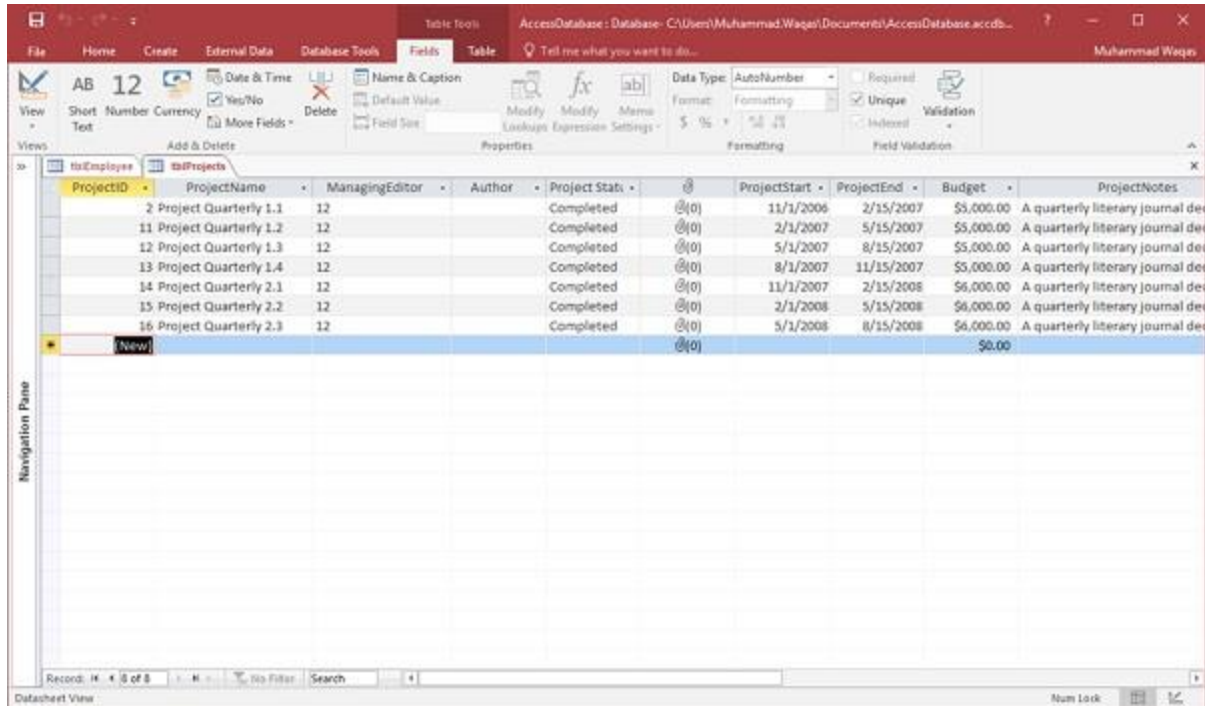
Data Query

A query is a request for data results, and for action on data. You can use a query to answer a simple question, to perform calculations, to combine data from different tables, or even to add, change, or delete table data.

- As tables grow in size they can have hundreds of thousands of records, which makes it impossible for the user to pick out specific records from that table.

- With a query you can apply a filter to the table's data, so that you only get the information that you want.

- Queries that you use to retrieve data from a table or to make calculations are called select queries.

- Queries that add, change, or delete data are called action queries.

- You can also use a query to supply data for a form or report.

- In a well-designed database, the data that you want to present by using a form or report is often located in several different tables.

- The tricky part of queries is that you must understand how to construct one before you can actually use them.
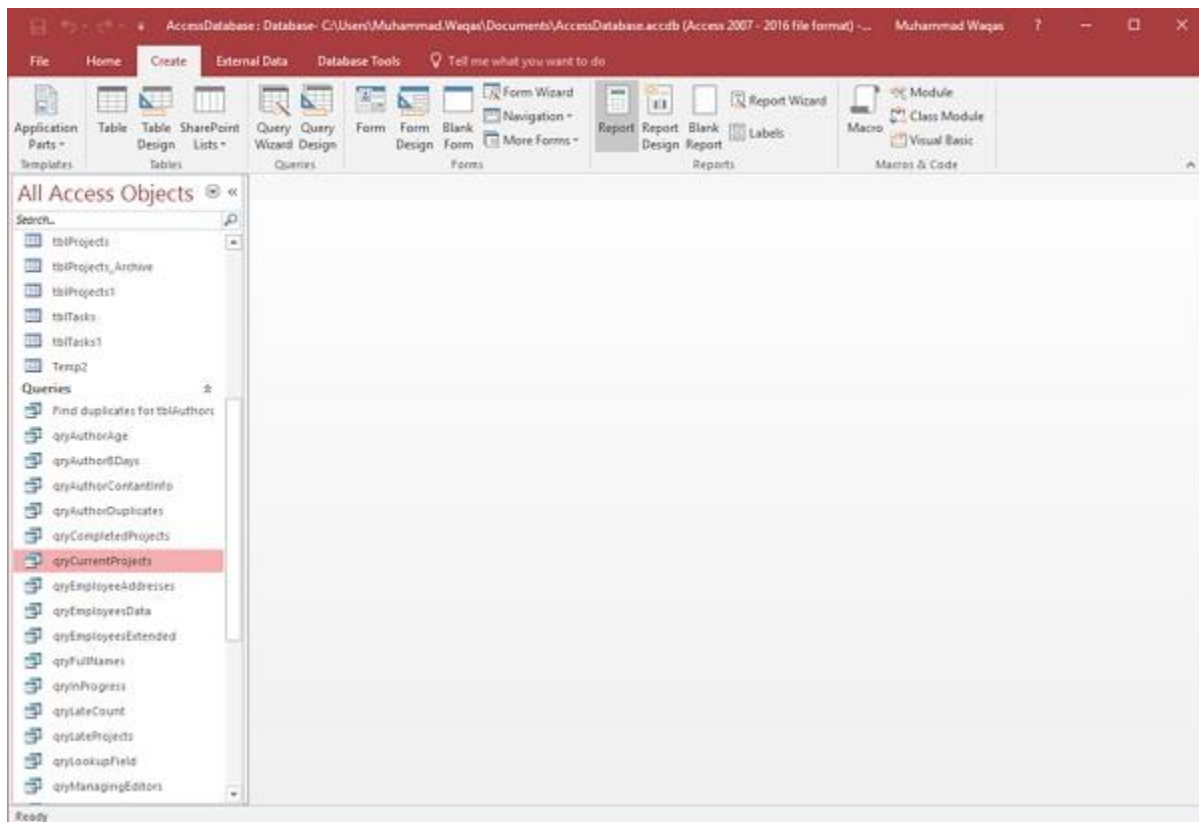
Report Generate:

In this chapter, we will be covering the basics of reports and how to create reports. Reports offer a way to view, format, and summarize the information in your Microsoft Access database. For example, you can create a simple report of phone numbers for all your contacts.

- A report consists of information that is pulled from tables or queries, as well as information that is stored with the report design, such as labels, headings, and graphics.

- The tables or queries that provide the underlying data are also known as the report's record source.

- If the fields that you want to include all exist in a single table, use that table as the record source.

- If the fields are contained in more than one table, you need to use one or more queries as the record source.

Example

We will now take a simple example to understand the process of creating a very simple report. For this, we need to go to the Create tab.

Before clicking on the Report button to create a basic report, make sure the proper query is selected. In this case, **qryCurrentProjects** is selected in your navigation pane. Now click on the Report button, which will generate a report based on that query.
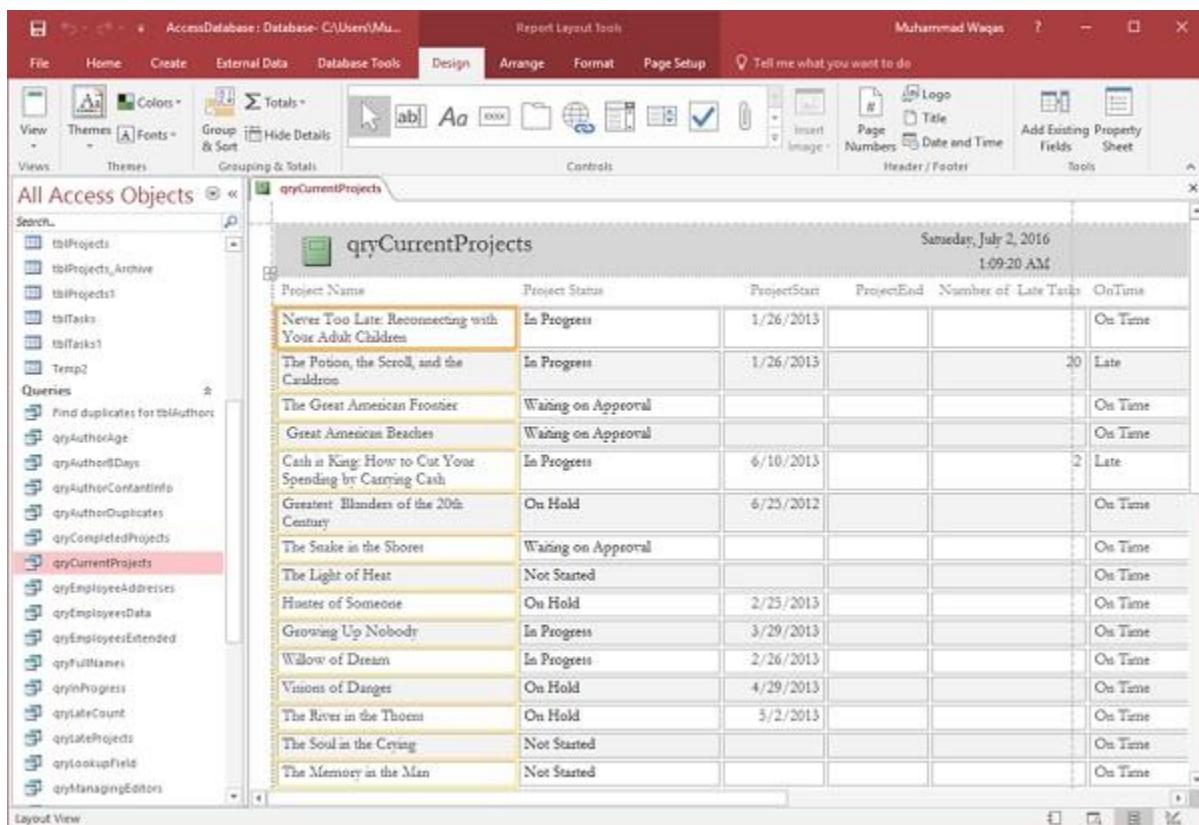
You will see that the report is open in Layout view. This provides a quick way to adjust the size or width of any of your fields that you see on the report. Let us now adjust the column widths to make everything fit in a better way.
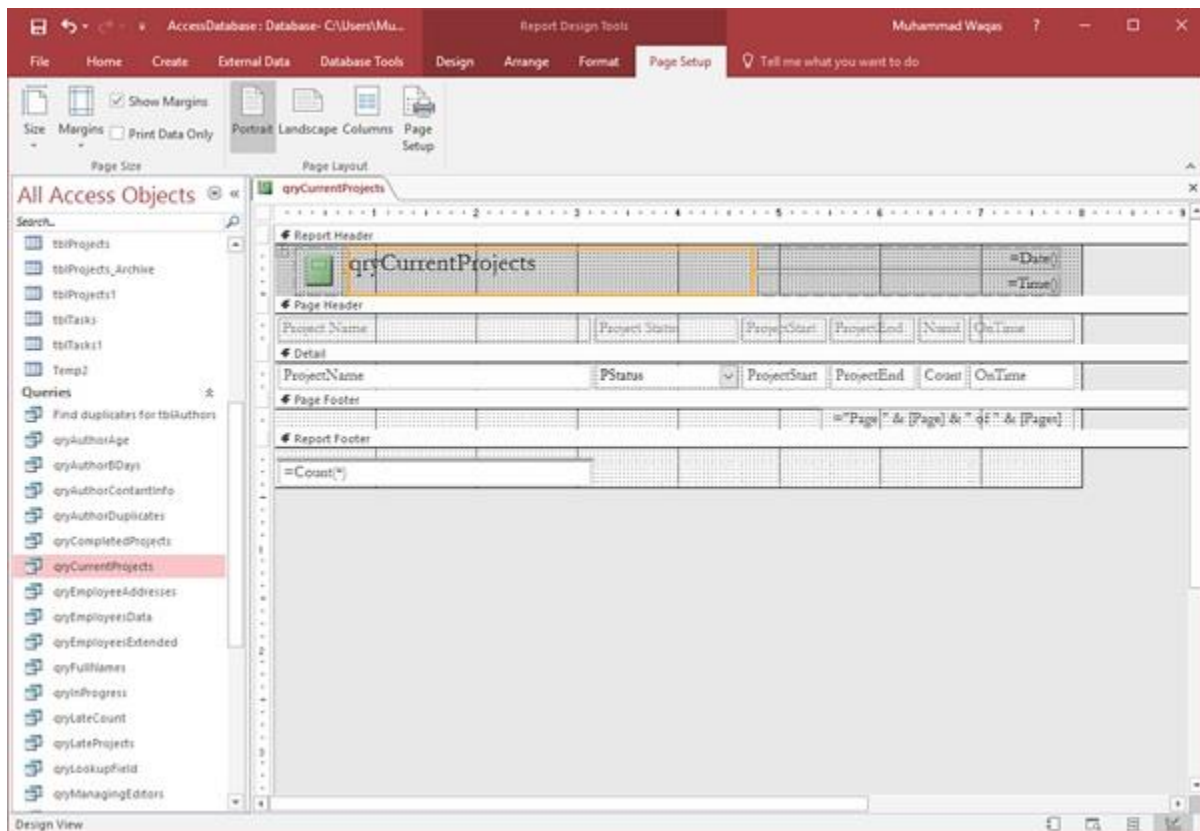
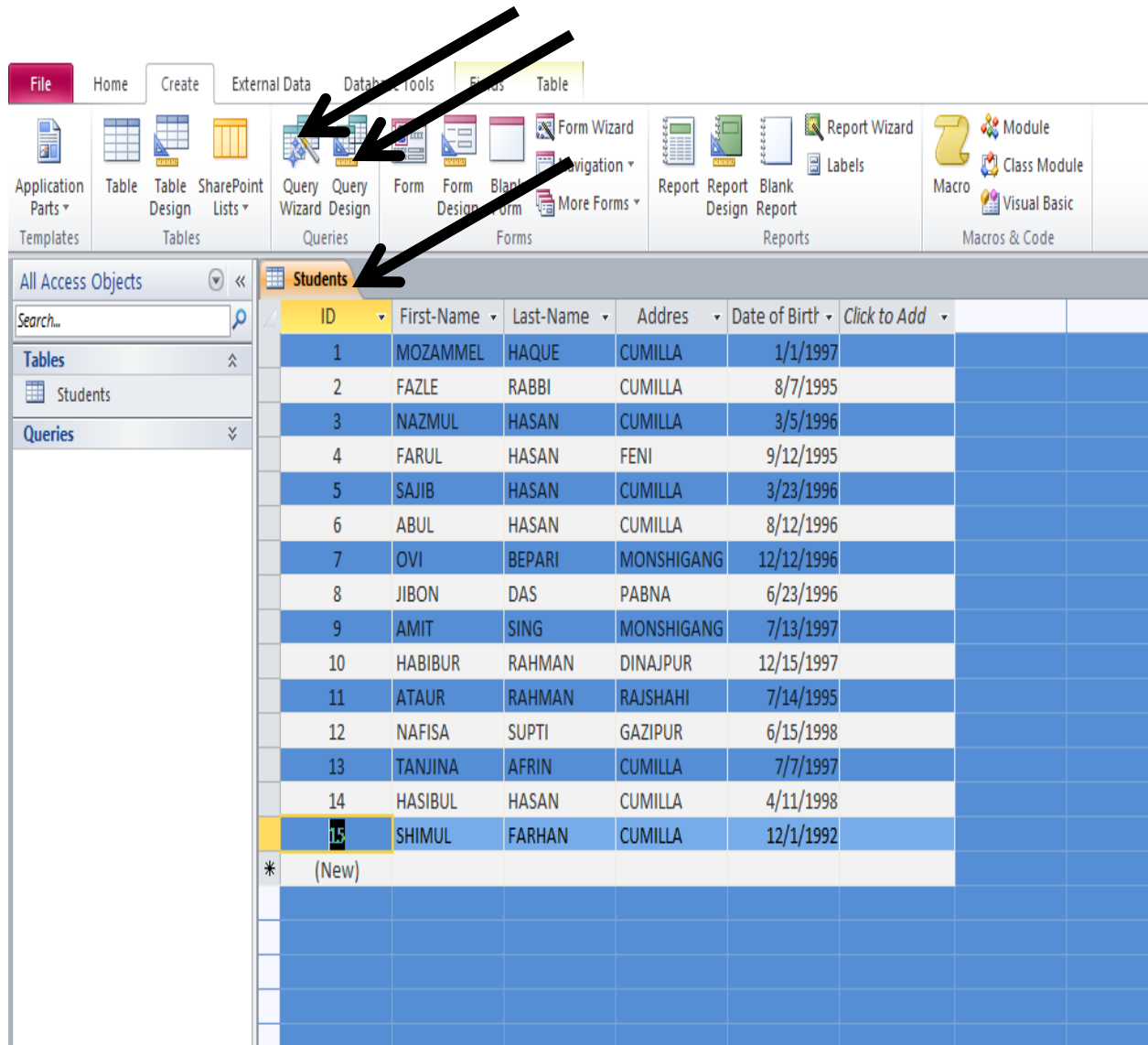Scroll down and adjust the page control at the bottom.

This was a very quick way to create a very simple report. You could also make minor changes and adjustments from the report design view.

- Just like forms, a report is made up of a variety of different sections.
- You have the detail section, which is where all of your data lives for the most part.
- You also will see a page header and a page footer section; these appear at the top and at the bottom of every single page in your report.

Create a students data base