

INTRODUCTION

A database is a collection of information related to a particular object, such as maintaining addresses and phone numbers, a list of library books, keeping students' record pertaining to academic and co-curricular achievements, keeping employees' information, etc. It helps the users to organise, retrieve, sort, and edit data as per their requirement.

Database consists of fields and records. In simple terms, records refer to rows and fields refer to columns in Excel.

FIELD : A column within a database that contains only similar type of data is called **Field**. For example, Roll No., Name, Address are different fields.

RECORD : A row in a database is called a **Record** that consists of the information about one person or one object. For example, in the given figure the data – 101, Anju, 75, 82, 90, 247, 82.33 of one student, forms a record.

FIELD NAME : It is a column label for the field in a database. All the field names appear in one row. For example – Roll No, Name, English, Hindi, Math, Total, Per are the field names in the given database.

	A	B	C	D	E	F	G
1	Roll No	Name	English	Hindi	Math	Total	Per
2	101	Anju	75	82	90	247	82.33
3	102	Manju	82	72	67	221	73.67
4	103	Ranjana	72	70	76	218	72.67
5	104	Kirti	85	79	82	246	82
6	105	Hemant	96	98	89	283	94.33
7	106	Kunal	85	92	98	275	91.67
8	107	Ankita	87	85	88	260	86.67

Figure 2.1: Excel Database

CHANGING YOUR TOMORROW

➤ USING A FORM TO ENTER DATA

A Form is a window that contains numerous fields to enter, modify, and view one record at a time. Each field holds a field name so that any user who views the form or enter data in it, gets an idea of its contents. Forms often contain Command buttons and other controls that perform various tasks. When you enter information into a form, the data gets saved directly in the database.

NOTE

Before adding a record in the form, the worksheet must have field names at the top of each column. Microsoft Excel uses these field names as a label to ease the process of entering records in a form. Make sure that there are no blank lines in the range of data.

- In Excel 2016, the **Forms** option is hidden. To add a Form button, select **File > Options**. The **Excel Options** dialog box will open.

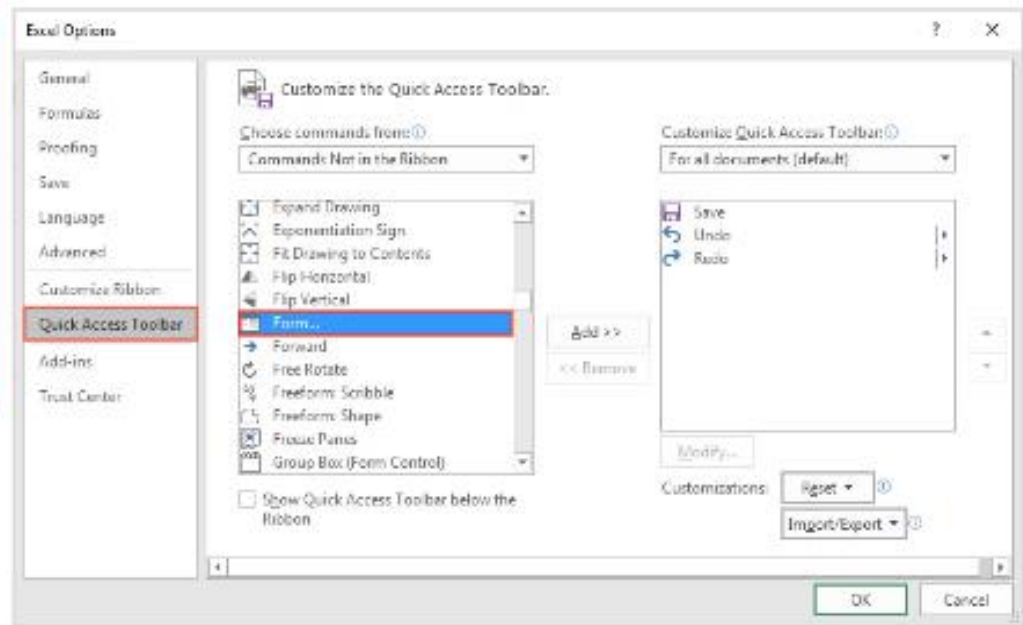




Figure 2.2: Excel Options Dialog Box

- ▶ Select the **Quick Access Toolbar** option in the left pane.
- ▶ Click on the drop-down arrow of **Choose commands from** the list box.
- ▶ Select **Commands Not in the Ribbon** option from the drop-down list and choose the **Form** command.
- ▶ Click on the **Add** button . Click **OK** and you will find the **Form** button  on the **Quick Access Toolbar**.

Know the Fact

Rules To Enter Field Names:

- ▶ Each Field name should be placed in a separate cell.
- ▶ Field names should be unique.

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➤ ADDING A NEW RECORD IN A FORM

Using the data form, we can add a new record in the database. Follow these steps to enter new records:

- Click on the cell **A1**. Select the **Form** button on the **Quick Access Toolbar**. The **Sheet1** dialog box appears. It contains the record of the first student in your database.
- To add a new record, click on the **New** button.
- Type the data in the respective fields of the Form.
- After you have finished typing data, press **Enter** key to add the row to the bottom of the range or table.
- You can move to the previous or next record by clicking on the **Find Prev** and **Find Next** buttons respectively.
- Click on the **Close** button to close the data form.

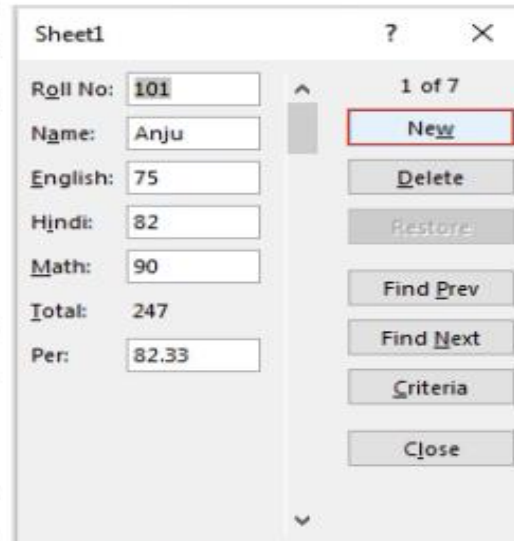


Figure 2.3: Adding a Record Using Form

Know the Fact

An easy way to add a custom style from another workbook is to copy the cells formatted with that style and paste them into a new workbook.

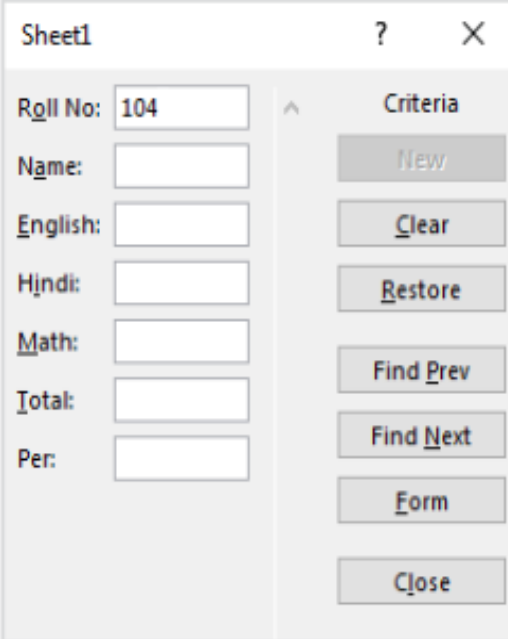


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➤ SEARCHING A RECORD

This option is used to search the records with specific values.

- Click on the **Form** button.
- Select the **Criteria** button in the **Sheet1** dialog box.
- Type the data that you want to search in the appropriate field. For example, type **104** in **Roll No:** text box and press the **Enter** key.
- If the record exists and matches the given value for that field, it will be displayed. Otherwise, the first record will be displayed.



The screenshot shows a dialog box titled "Sheet1" with a search criteria panel. The panel has a "Criteria" header and a list of input fields: "Roll No:" (containing "104"), "Name:", "English:", "Hindi:", "Math:", "Total:", and "Per:". To the right of these fields are buttons: "New", "Clear", "Restore", "Find Prev", "Find Next", "Form", and "Close".

Figure 2.4: Searching a Record Using Form

Quick Quiz

What is a Database?


Let's Discuss

Importance of using Form.

➤ SORTING DATA

Sorting means, arranging the data either in an ascending or descending order. In a worksheet, data can be sorted in rows on the basis of text, numbers or dates. Once the data is organised, it becomes easy to work on it.

Follow these steps to sort the given data:

- Open any worksheet and select the cell range that you want to sort.
- Click on any cell, say **B2**. Now select the **Sort** button  in the **Sort & Filter** group in the **Data** tab. The **Sort** dialog box appears and the entire database gets selected.
- Click on the **Sort by** drop-down arrow and select the field on the basis of which you want to sort the data. For example, select the **Name** field.
- Select the **Values** option from the **Sort On** drop-down list. Select the sorting order from the **Order** drop-down list. If **Sort by** contains alphanumeric data then **A to Z** option gets selected automatically. In case, **Sort by** contains numeric data then **Smallest to Largest** option gets selected.
- Select the **My data has headers** checkbox to exclude the first row, containing the column headings for sorting. Otherwise, uncheck the checkbox to include the first row headings in sorting.
- Click **OK**. The database will be sorted in descending order on the basis of **Name** field.

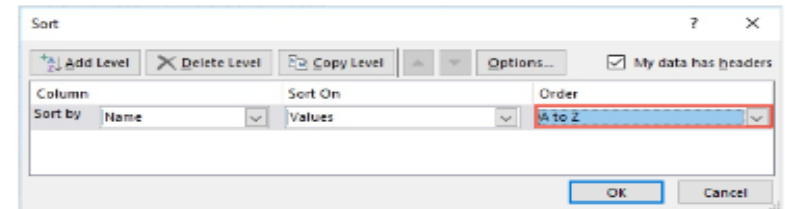
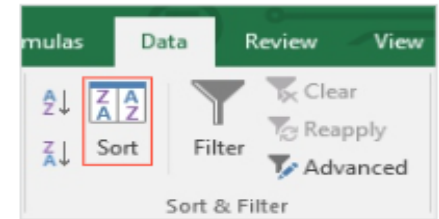


Figure 2.5: Sort Dialog Box

CHANGING YOUR TOMORROW

- 1. write the steps to create a Form?
- .2. What is Database?
- 3. What is Record?
- 4. What is Field?

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THANKING YOU

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