

Digital Documentation

Important features from each menu bar

File	Edit	View	Insert
New	Cut/Copy/Paste	Toolbars	Page Break
Open	Find, Find & Replace	Sidebar	Image/Chart/Media/Shape
Templates	Track Changes		Comment
Export			Hyperlink
Save/Save As			TOC and Index
			Header and Footer
			Page number
			Special Character
Format	Styles	Tables	Tools
Anchor	Headings/Characters/Lists	Insert Table	Spelling
Arrange	Edit Style	Insert	Thesaurus
Wrap	Update Selected Style	Delete	Mail Merge Wizard
Align	New Style from Selection	Select	Protect
Character/Paragraph	Load Styles from Template	Merge Cells	Macros
Page Style	Manage Styles	Split Cells	

Style Categories – Page, Paragraph, Character, Frame, List, Table

Accessing Styles

1. **Style** option from menu bar
2. From **Toolbar**
3. Using **Sidebar**, by clicking on Styles Icon (BEST way, EASIEST)
4. Shortcut – **F11**

Feature	Steps
Applying Styles	Select Text → Styles sidebar → Click on desired style to apply
Fill Format	Styles sidebar → Select desired style → Fill Format (bucket-like icon)
Creating a Style	Format the document → Styles sidebar → Choose style category → Styles Action → New Style from Selection → Dialog box → Name → OK <i>(from selection)</i>
	Format the text → Styles sidebar → Choose category → Drag the selected portion to the Style menu <i>(using drag and drop)</i>
Updating a Style	Format the text → Styles sidebar → Styles Action → Update Selected Style
Load Styles	Styles sidebar → Styles Action → Load Styles → dialog box → Choose category → Select template to copy styles from → Select the styles to be copied → OK
Insert image	Document → Cursor where image is to be inserted → Insert > Image → Choose file → Open
	Open file browser window (Win + E) → Select image → Drag to the document → Drop at the desired location
	Select image → Copy (Ctrl + C) → Paste on desired location (Ctrl + V)
	Insert > Image → Choose file → Check Insert as Link option → Open
Modifying Image	View>Toolbars>Image → Click on the desired tool to apply
Resizing Image	Select image → 8 sizing handles → Drag and resize
Deleting image	Select image → Press Delete key on keyboard
Using Drawing Tools	View>Toolbars>Drawing Toolbar → Select desired tool
Changing properties of object	Drawing Object Properties Toolbar → Choose property (icon) → Change value parameters
Resizing Objects	Select object → 8 resizing handles → Drag and resize
Grouping Objects	Hold Shift key and select objects → Format>Group> Group/Ungroup/Enter Group/Exit Group

Positioning Image In the Text

1. **Arrangement** – position of image w.r.t other drawings/text (*Bring to Front, Send to Back, Forward One, Backward One, To Foreground, To Background*)
2. **Anchoring** – retain position to page/paragraph/character/frame
3. **Alignment** – vertical/horizontal placement of image w.r.t its anchor
4. **Text Wrapping** – placement of image w.r.t TEXT (*Wrap off, Page Wrap, Optimal Page wrap, Wrap left, Wrap right, Wrap through*)

Filter

1. **Invert** – Inverts colour values of image (inverts brightness if greyscale)
2. **Smooth** – Softens the contrast
3. **Sharpen** – Increases the contrast
4. **Remove Noise** – Removes single pixels
5. **Solarisation** – Reverses the tone (*light → dark, dark → light*)
6. **Aging** – Stimulates the effect of time
7. **Posterise** – Reduces colours, picture appears like a painting
8. **Charcoal Sketch** – Changes image as charcoal sketch
9. **Relief** – Adjusts light source to create shadow
10. **Mosaic** – Joins group of pixels into a single area of one colour

Advanced Features

Feature	Steps
Hierarchy of Headings	Enter text (H1-H10) → Styles sidebar → Headings → Apply heading style to each text
Creating TOC	Enter contents → Apply heading styles → Insert>Table of Contents and Index>Table of Contents, Index or Bibliography → dialog box → Change name <small>(default Type tab)</small> → OK
Customising TOC	Right click on TOC → Edit Index → dialog box → Tab (<i>Type/Entries/Styles/Columns/Background</i>) → Edit as desired → OK
Updating TOC	Right click on TOC → Update Index
Deleting TOC	Right click on TOC → Delete Index
Checking Template	File → Properties
Creating a doc with templates	File>New>Templates → selection window displayed → Select template → Click Open
Creating Template	Open document → File>Templates>Save → Templates dialog box → Name and category → Check Set as Default (optional) → Click Save
Use In-built Templates	Open doc → File>Templates>Manage Templates → dialog box → Select template → Click Open → Make changes → Save
Online Templates	File>Templates>Manage Templates → dialog box → <i>Browse Online Templates</i> icon <small>(lower left corner)</small> → official templates page of Libre gets opened → Download → Open Writer → File>Templates>Open Template... → Browse → Select file → Click Open
Importing a Template	File>Templates>Manage Templates → dialog box → <i>Import Templates</i> icon <small>(bottom right corner)</small> → Select Category/ Create New <small>(check box → add name)</small> → Click OK → 'Open' dialog box → Browse → Select file → Click Open
Editing a Template	File>Templates>Manage Templates → dialog box → Right click on the template to be edited → Select Edit → <small>Make changes → Save</small>
Exporting a Template	File>Templates>Manage Templates → dialog box → Select template to be exported → Click Export → Select Path dialog box → Choose location → Click OK
Applying Templates to a Blank Doc	Open document → Open desired Template → Ctrl + A & Ctrl + C <small>(select all contents of template and copy)</small> → Ctrl + V (Paste on the document)

Components of Track Changes Toolbar

1. **View Track Changes**
2. **Record Track Changes**
3. **Previous Track Changes /Next Track Changes**
4. **Accept/Accept All Track Changes**
5. **Reject/Reject All Track Changes**
6. **Manage Track Changes**
7. **Insert Comment**

Feature	Steps
Protecting	Edit>Track Changes>Protect → Enter Password dialog box → Type password (Password & Confirm text boxes) → Click OK
Recording Changes	Edit>Track Changes>Record (same thing for all other components)
Accepting/Rejecting	Click on the change made → Select Accept Track Change/Reject Track Change
Manage Track Changes	Edit>Track Changes>Manage... → dialog box → contains details and options to accept and reject
Adding Comments	Toolbar (View>Toolbars>Track Changes) → Insert Comment button → Comment box inserted (right side, includes details like writer's name, date, time) → Type comment → Click anywhere on the doc to activate
Deleting Comments	Bottom right arrow on the comment box → Click Delete Comment
Comparing Documents	Edit>Track Changes> Compare Documents → Compare To dialog box → Browse and select original file to be compared → Manage Changes dialog box → perform action (accept/reject) → Close dialog box → Save

Group – Different shapes behave as the same entity; change applied on one works on all

Style

Collection of all formatting information

- Effective repeated formatting
- Avoid inconsistency
- Reduce time and effort
- Improved content of document, not just appearance

Fill Format

Applying same style at many places scattered across the document

- Convenient way to apply styles across multiple locations
- Reduces manual effort and time

Digital image/Picture

Representation of image in a finite set of digital values from 0 to 1

- Easier to understand
- Visual appeal

Image as Link

The reference of image is stored as a link

- Good for multiple copies of the same image
- Reduces the size of the document

Table of Contents

Feature to insert an automated table of contents/index

1. Entries taken from headings and sub-headings hyperlinked
2. Navigation is easier
3. Tab types - Type, Entries, Styles, Columns, Background

Templates

Preset layout that helps to create professional/formal documents easily

- Reduces the need to copy specific content in multiple documents
- Contains all features that a regular document does, but these are DEFINED.
- Same content segregation, formatting features and appearance.

Track Changes

Record of all changes made in a document

1. Easier commenting, editing, reviewing among multiple users
2. Changes can be accepted or rejected by the original author
3. Reviewers can add comments (different coloured boxes for comments if multiple users added them)

Electronic Spreadsheet

Feature	Steps
Consolidate	Sheet with Data → Data>Consolidate → Choose Function (SUM, MAX, etc.) → “Source data ranges” and “Copy results to” → Add ranges → Options (“Link to source data”) (optional) → OK
Subtotals	Sheet → Data>Subtotals → Choose column in Group by → Select column for Calculate Subtotals for → Select function from Use functions → 2 nd Group, 3 rd Group tabs for more groups and repeat (optional) → OK
What-if Scenarios	Select cells → Tools>Scenarios → Name the scenario → OK
What-if Analysis	Create input data → Write formulas for output data → Data>Multiple Operations → Enter cell ranges for Formulae, Row Input Cell, Column Input Cell → OK
Goal Seek	Write formula in a cell → Tools>Goal Seek → Add Formula Cell, Variable Value and Target Value → OK

Enable Macro Recording – **Tools>Options>LibreOffice>Advanced** → **Optional Features** → Check “*Enable macro recording*”

Feature	Steps
Recording & Saving a Macro	Tools>Macros → <i>Record Macro</i> → Actions will be recorded → <i>Stop Recording button</i> → Basic Macros dialog box → Choose location from Save Macro to list box (Library and Module) → Click Save
Running a Macro	Tools>Macros>Run Macro → Macro Selector dialog box → Select library and module of macro’s location → Select the Macro (Macro name list) → Click Run
Organising a Macro	Tools>Macros>Organise Macros> LibreOffice Basic → Basic Macro dialog window → Click Organiser... → Basic Macro Organiser dialog box → Create a library (steps below) or Select one → Select/Create a Module → The macro gets stored and can be run anytime
Creating a Library & Module	Basic Macro Organiser dialog box → Libraries > New Basic Macro Organiser dialog box → Modules Tab > New

SHEETS

Feature	Steps
New Sheet	Plus (+) icon located on the bottom left of the spreadsheet Or Right-click on the existing sheet tab → Select Insert Sheet from the drop down Or Sheet > Insert Sheet → Dialog box appears → Choose New → Specify position, number and name.
Reference to other sheets	Using Mouse - Select the cell where you want the result → Click = on the formula bar to start formula → Click on the sheet tab that contains the required data → Click on the cell you want to reference → Press Enter Using Keyboard - Select the cell where you want the result → Type = to begin the formula → Type \$ sign → Type the sheet name inside single quotes (' ') Use single quotes especially if the sheet name contains spaces → Type a dot . after the sheet name → Type the required cell address → Press Enter
Reference to other docs.	Using Mouse - Select the cell → Click = on the formula bar → Switch to the other spreadsheet file → Click on the required sheet tab → Select the required cell or cell range → Press Enter Using Keyboard - Select the cell → Type = on formula bar → Type the file path inside single quotes ' ' → Type # → Type \$ → Type the sheet name → Type . → Type the required cell address or range → Press Enter

Inserting a Sheet from Another File	Open the current spreadsheet → Go to Sheet menu → Click Insert Sheet → Select From File → Click Browse → Select the required file → Select the required sheet from the list → Check the Link checkbox to ensure changes are reflected → Click OK
Updating Data	Tools > Options > LibreOffice Calc > General > Updating

HYPERLINKS

Feature	Steps
Creating Hyperlink	Open the required spreadsheet → Insert > Hyperlink → In the Hyperlink dialog box, click Document (left pane) → Click the button next to Path → Select the required spreadsheet document → Click Target → Select the required sheet → Click Apply and Close → Enter the desired text in the Text box → Click Apply and OK
Opening Hyperlink	Press and hold Ctrl key → Click on the hyperlinked text
Editing Hyperlink	Place the cursor on the hyperlink → Right-click → Click Edit Hyperlink → Make required changes in the Hyperlink dialog box → Click OK
Removing Hyperlink	Right-click on the hyperlink → Click Remove Hyperlink
Linking to External Data	Open the spreadsheet → Select the cell where external data is to be inserted → Go to Sheet > Link to External Data → Enter the URL in the dialog box → Press Enter → Select the required language option → Click OK
Linking to Registered Data	Go to Tools > Options > LibreOffice Base > Databases → <small>dialog box appears</small> Click New → In the Create Database Link dialog box, select the required database file (Browse it needed) → Click OK

SHARING AND REVIEWING

Feature	Steps
Sharing a Spreadsheet	Save a spreadsheet → Go to Tools > Share Spreadsheet → Share Document dialog box appears → Check “Share this spreadsheet with other users” → Click OK → Confirmation dialog box appears → Click Yes → Spreadsheet name displays (shared) in title bar
Opening a Shared Spreadsheet	Open the shared spreadsheet → Warning message appears → <small>(Optional)</small> Check “Do not show warning again” → Click OK → Spreadsheet opens in shared mode
Saving a Shared Spreadsheet	Make changes in the shared spreadsheet → Save the spreadsheet → If no conflict <small>among multiple users,</small> confirmation message appears → If conflict occurs, Resolve Conflict dialog box appears → Resolve conflicts <small>only one user can, the others will be locked from that</small> → Save the spreadsheet
Disabling Shared Mode	Open the spreadsheet → Go to Tools > Share Spreadsheet → Share Document dialog box appears → Uncheck “Share this spreadsheet with other users” → Click OK → Confirmation dialog box appears → Click Yes → “(shared)” disappears from title bar
Recording Changes	Ensure shared mode is disabled → Go to Edit > Track Changes > Record → Make required changes in the spreadsheet → Modified cells are highlighted → Move cursor over changed cell to view change details
Adding Comments	Go to Edit > Track Changes > Comment → Add Comment window appears → Enter comment → Click on the cell to view the comment
Inserting Comment	Select the cell → Go to Insert > Comment → Comment box appears → Type the comment → Right-click the cell to manage comment
Edit / Delete / Show / Hide Comment	Right-click the cell containing comment → Select Edit Comment/Delete Comment/Show Comment/Hide Comment
Formatting Comment	Right-click the cell containing comment → Select Format Cell → Format Cells dialog box appears → Apply required formatting options (Font, Effects, Alignment, Borders, Background, Cell Protection) → Click OK
Reviewing Changes – Show Changes	Go to Edit > Track Changes > Show → Show Changes dialog window appears → Select required options → Click OK
Reviewing Changes – Accept / Reject	Go to Edit > Track Changes > Manage → Manage Changes dialog window appears → Select change entry → Click Accept / Accept All / Reject / Reject All → Click Close

Merging Two Files	Open the original spreadsheet → Go to Edit > Track Changes > Merge Document → Merge With dialog window appears → Select the second spreadsheet file → Click Open → Manage Changes dialog window appears → Click Accept All → Save the spreadsheet
Comparing Two Documents	Open the original spreadsheet → Go to Edit > Track Changes > Compare Document → Compare To dialog window appears → Select the second spreadsheet file → Click Open → Manage Changes dialog window appears → Click Accept / Reject as required → Click Close

Consolidate

- Combine information from multiple sheets of the spreadsheet into one place to **summarize** the information
- It is used to view and **compare variety of data** in a single spreadsheet for identifying trends and relationships.

Groups and Subtotal

- Subtotals** - Group data automatically to apply common functions like sum, average, etc. on it.
- Group and Outline** - Create an outline of the selected data and can group rows and columns together so that one can collapse (-) to hide it or expand (+) it.

What-if Scenarios

- A set of values that can be used within the calculations in the spreadsheet.
- It is used to **explore and compare various alternatives** depending on the changing conditions.
- It is used in the beginning of any project to **optimize the output**.
- It can **predict the output** and one can make the **best plan of action** by trying various inputs.

What-if Analysis Tool

- Planning tool for what-if questions
- It has two arrays of cells - one for input values and the other for the formula to display result
- It is useful to check the output at the beginning to understand the efficiency of the analysis.
- Example of its usage** - When we want to know how much profit we earn for a particular product, for a series of selling units.

Goal Seek

- The previous tools were used to obtain the desired output.
- Goal seek is used to **find out the input for a specific output**.
- For example - If you want to know how many more marks need to achieve to get your target percentage of 95%, you can use goal seek.

Macros

- Macros are a set of stored functions used to automate processes repeatedly. It is a single instruction that executes a set of instructions.
- They are used to perform most of the redundant tasks with relative ease.
- Macros can save us the effort of remembering and typing the formulas for calculations if they are used as a function.
- Instead of using Sub and End Sub (which help in doing a particular action like formatting, etc.), use **Function and End Function** (which helps in **returning a value** by accepting arguments/values, and performing calculations)

Hyperlinks

- They are useful to jump to a document stored at a different location from within a document. It can be used to jump from a sheet in the same spreadsheet, different spreadsheet or a website.
- Absolute hyperlink** - Stores complete location where a file is stored and it won't work if the file is removed from that location.
- Relative hyperlink** - Stores the location with respect to current location. If the complete folder containing active spreadsheet is moved, the relative link will still be accessible as it is bound to the source folder where the active spreadsheet is stored.

Shared spreadsheet

- Can be used by multiple users at a time
- Users can make changes simultaneously
- It saves the trouble of keeping track of multiple copies of the same spreadsheet
- It allows working in collaboration so that everyone can contribute, make changes, and view it.

Database Management System

Advantages of DBMS

1. The data is stored in an organized manner.
2. It allows analysis of data based on criteria.
3. It allows sharing of data.
4. It reduces the need to repeat data (Data Redundancy)
5. Inconsistency of the data is reduced.
6. It offers increased efficiency, accuracy, and validity.
7. It provides security and encryption by setting passwords or translating data.

Data and Information

- **Data** – The *raw facts* about any person, place, activity, or things.
Examples – marks, weights, prices, costs, names, etc.
- **Information** – The processed or organized form of data.
Examples – pay-slips, schedules, worksheet, bar charts, invoices, account returns, etc.
- **Comparison** - Marks obtained by the students are data, the report card/marksheet is the information.
The temperature recorded is the data which can be processed to find out the maximum or minimum temperature of day and night.

Database and Database Management System (DBMS)

- **Objective** - The ease of entering data, its efficient storage, accuracy and fast retrieval.
- Computerized databases are used to store, manipulate, and manage the database. **Examples** – booking railway tickets, search for a book in library, get salary details, get the balance amount after withdrawal from ATM, etc.
- **A database is a collection of logically related data items stored in an organized manner.**
- The information can be added, modified, deleted, or displayed.
- **The software used to create, update, and retrieve data is known as the database management system.** It facilitates planning and maintenance of a database for the user.
- **Common DBMS** – OpenOffice Base, LibreOffice Base, Oracle, Ingress, MySQL, etc.

Data Models

A data model is the structure of a database that describes the manner in which data will be stored and retrieved, depending on the data being stored.

Types:

1. **Hierarchical Data Model** – stores data in a tree-like structure in the form of *records*. All these records are linked to each other at various levels, forming a hierarchy.
2. **Network Data Model** – multiple records are linked to the same master file, making an inverted tree structure
3. **Relational Data Model** – most common, proposed in 1970 by E.F. Codd. It is based on the principle of setting relationships between two or more tables of the same database.

Terminology

1. **Entity** – A real world object about which the information is to be stored.
2. **Attributes** – The details associated with the entity
3. **Table** – A collection of logically related records organised in the form of rows and columns
4. **Field** – The smallest entity of a database. They are individual record characteristics.
5. **Data values** – Raw data represented in numeric, character, or any other form.
6. **Record or row** – The data values for all the fields is collectively called a record.
7. **Primary Key** – A field that uniquely identifies a row in a table.

8. **Composite Key** – Usage of more than one fields to identify a record
9. **Foreign Key** – The field of one table that is used to uniquely identify records of another table. It builds a relation between two tables
10. **Candidate Key** – The field values that are eligible to be the primary key
11. **Alternate Key** – Out of the candidate keys, only one or two are made primary keys. The others are alternate keys.

2. **Forms** – Used to enter data in an easy and user-friendly manner (with text boxes, labels, lists, checkboxes, etc.)
3. **Queries** – Used to retrieve the desired information by asking questions
4. **Reports** – The output of a query is displayed in a proper layout.

Data Types

1. Text
2. Numeric
3. Currency
4. Date
5. Boolean
6. Binary

Objects of RDBMS

1. **Tables** – Basic unit of DBMS that stores data in rows and columns.

Feature	Steps
Creating a New Database	Open LibreOffice Base → Database Wizard opens → Click Create a New Database → Click Next → Select radio button with option 'No, do not register the database' → Select 'open a database for editing' or 'create tables using wizard' → Click Finish → Save As dialog box appears → Choose location, name the file and save (.odb extension)
Opening a Database	File>Open → 'Open' dialog box → Browse for the file and select the desired one → Click Open
Creating a Table Using Wizard	Open LibreOffice Base → Database Wizard opens → Click Create a New Database → Click Next → Select radio button with option 'No, do not register the database' → Select 'create tables using wizard' → Click Finish OR from tasks pane, select that thing → Table wizard dialog box opens → Select table from Sample tables list → Select required fields → Move fields from Available Fields to Selected Fields using > or >> → Click Next → Set field types and formats → Click Next → Set primary key → Click Next → Select desired option → Click Finish → Data Sheet View opens
Creating a Table Using Design View	In Database window click "Create Table in Design View" from Tasks Pane → Table Design window opens → Enter field name in Field Name column → Press Tab → Select data type from Field Type list → Set required properties in Field Properties pane → Press Tab → Enter description (optional) → Press Tab to move to next row → Repeat steps for all fields
Setting Primary Key	Right-click before the required field name → Select Primary Key → Key icon appears before the field name
Saving a table	Click Save button or go to File > Save As → Enter table name → Click OK → Close the table design window
Opening Table / Entering Data	Double-click the required table in Tables Object Area → OR Right-click the table and Click Open → Datasheet view appears → Enter data in fields → Press Tab to move to next field → After completing a record, cursor moves to next record.
Editing Data	Open the table → Click on the field value to be edited → Enter new value → Save the table → Press Esc to cancel changes (if required)
Deleting Records	Open the table → Select the record → Press Del key OR Right-click the record → Click Delete Rows OR Go to Edit > Delete Record → Confirmation dialog appears → Click Yes to delete → Click No to cancel
Renaming Table	Right click on the table → Select Rename... → Type new name and press Enter
Sorting Data (Single Field)	Open the table in datasheet view → Select the field to sort → Click Sort Ascending icon or Sort Descending icon
Sorting Data (Multiple Fields)	Open the table → Click Sort icon on toolbar → Sort Order dialog box appears → Select required field(s) → Choose order (Ascending / Descending) → Click OK
Closing LibreOffice Base	Go to File > Close OR Click Close (X) button

Relationships Between Tables

- Relationships help to avoid redundancy and inconsistency of data. It ensures that no data is repeated and there are no different data values for a single entity.
- Setting relationships require at least one common field and that field must have same data types among each table.
- **Master Table** – The main table with required information about entities. (the record in it is the **master record**)
- **Transaction Table** – It records the corresponding activities or events related to the entities in master table. Simple, it is the table with is related with the main table. (the record in it is the **transaction record**).

Types of relationships

1. **One-to-One:** One specific record of a master table has one and *only one corresponding record* in the transaction table.
2. **One-to-Many:** One specific record of the master table has *more than one corresponding records* related in the transaction table.
3. **Many-to-Many:** Multiple records in the master table correspond to multiple records in the transaction table.

Advantages of Relating Tables

1. Prevent data redundancy
2. Prevent missing data by syncing deletions. (**Referential integrity**)
3. Restricts the user from entering invalid data in the referenced fields.
4. Any updates in master table are automatically reflected in the transaction tables.

Referential Integrity

According to this principle, no unmatched foreign key values should exist in the database.

If a record is deleted in the master table, it must be deleted in the transaction table as well.

Options to maintain integrity:

1. **No action** – (default) User is not allowed to delete/update any record in master table if any related record exists in the transaction table
2. **Update cascade** – Allows user to update/delete the referenced field but along with the related record in the transaction table.
3. **Set NULL** – Assigns NULL value to all related fields if the master record is deleted/updated.
4. **Set default** – Assigns any fixed default value to all related fields if the master record is deleted/updated.

Feature	Steps
Setting Relationship Between Tables	Go to Tools > Relationships → Relationship Design window appears → Add Tables dialog box appears → Select first table → Click Add → Select second table → Click Add → Click Close → Both tables appear in Relationship Area → Drag the common field from foreign key table → Drop it on the matching primary key field of the related table → Relationship line appears between the tables

Queries

Feature	Steps
Creating a Query Using Wizard	Open Database → Click Queries icon → Click Use Wizard to Create Query → Select required table → Move required fields using > button → Click Next → Set Sorting order (if required) → Click Next → Set Search Condition (Field, Condition, Value) → Click Next → Skip Summary steps (if not required) → Set Alias names (if required) → Click Next → Rename Query (if required) → Select Display Query option → Click Finish
Creating a Query in Design View	Click Queries icon → Click Create Query in Design View → Add required tables → Click Close → Add required fields to Design Grid → Set Alias names (if required) → Set Sorting order (if required) → Set Criteria in Criterion row (if required) → Click Run (F5) → Click Save → Enter Query Name → Click OK

Working with Numerical Functions in Query	Open Query in Design View → Add required tables → Add required fields → In Function row select Group (for grouping field) → Select required function (Sum/Count/Average/Min/Max) for numeric field → Set Criterion (if required) → Press F5 to Run Query → Save Query
Editing a Query	Click Queries icon → Right click on Query Name → Select Edit → Make required changes in Design Grid (Fields/Sort/Criteria/Function) → Click Run (F5) → Click Save → Close Query Window

Forms

Feature	Steps
Creating a Form Using Wizard	Open Database → Click Forms icon → Click Use Wizard to Create Form → Select required Table/Query → Move required fields using > button → Click Next → Skip Subform step (if not required) → Choose Layout (Columnar/Datasheet/Block) → Select Alignment → Click Next → Choose Data Entry option (Display/Enter/Both) → Click Next → Apply Style (Border/Background) → Click Next → Enter Form Name → Select Work with Form or Modify Form → Click Finish
Modifying a Form	Click Forms icon → Right click on Form Name → Select Edit → Form Design View opens → Make required changes → Save Form
Changing Background Color of Form	Open Form in Design View → Right click on Form → Select Page Style → Open Area tab → Choose Color → Click OK
Editing Labels (Caption/Formatting)	Open Form in Design View → Ctrl+Click on Label → Right click → Select Control Properties → Modify Label text / Font / Alignment / Size → Close Properties Dialog
Moving a Control	Open Form in Design View → Click on control (Label + Textbox selected) → Drag to desired position → Release mouse
Resizing a Textbox Control	Open Form in Design View → Ctrl+Click on Textbox → Drag position handlers to adjust size
Adding a Tool Tip	Open Form in Design View → Ctrl+Click on control → Right click → Select Control Properties → Enter text in Help Text property → Close Dialog
Adding Calendar to Date Field	Open Form in Design View → Ctrl+Click Date Field → Open Control Properties → Set Date Format → Set DropDown property to Yes → Close Dialog
Adding a Label (Title/Text) to Form	Open Form in Design View → Click Label tool from Form Controls toolbar → Drag to create label → Open Control Properties → Enter Label text → Set Font properties → Close Dialog
Adding a New Record Using Form	Open Form → Switch to Form View (Design Mode off) → Click New Record button → Enter data → Click Save Record button
Deleting a Record Using Form	Open Form in Form View → Navigate to required record → Click Delete button
Switching Between Design View and Form View	Click Design Mode button on Forms Controls toolbar to toggle views

A control is any element of a form like textbox, checklist, etc.

Reports

Feature	Steps
Creating a Report Using Wizard	Open Database → Click Reports icon → Click Use Wizard to Create Report → Select required Table/Query → Move required fields using >> button → Click Next → Modify Field Labels (if required) → Click Next → Set Grouping (if required) → Click Next → Set Sorting Field and Order (Ascending/Descending) → Click Next → Choose Layout (Tabular/Columnar etc.) → Select Header/Footer Layout → Choose Orientation (Portrait/Landscape) → Click Next → Enter Report Name → Select Dynamic or Static option → Choose Create Report or Modify Report → Click Finish

Modifying a Report	Click Reports icon → Right click Report Name → Select Edit → Report Builder window opens → Make required changes → Save Report
Inserting Title/Heading	Open Report in Edit Mode → Click Label tool from Report Controls toolbar → Drag to create label box → Open Properties → Enter Title text → Set Font style and size → Close Properties dialog
Inserting Date and Time	Open Report in Edit Mode → Click Page Header area → Click Insert menu → Select Date and Time → Choose desired format → Click OK → Reposition date if required
Creating Grouped Report	Open Report Wizard → Select required fields → In Grouping step select field for grouping → Complete remaining steps → Click Finish

Keyboard Shortcuts

- Accessing styles – **F11**
- Quit Fill Format/Cancel any drawing function – **Esc**
- Opening File Browser window – **Win + E**
- Copy – **Ctrl + C**
- Paste – **Ctrl + V**
- Link an image – drag and drop the image while holding **Ctrl + Shift**
- Deleting – **Delete** key
- Proportional resizing – **Shift** and then resize
- Select multiple things – **Shift** and click all you want to select
- Select All – **Ctrl + A**
- Open hyperlink – **Ctrl + Click**
- Templates window – **Ctrl + Shift + N**
- Save – **Ctrl + S**
- Open – **Ctrl + O**
- New – **Ctrl + N**
- Record changes – **Ctrl + Shift + C**
- Edit Label – **Ctrl + Click**