MS-ACCESS:-

❖ **Write down all steps for creating database in ms-access?**
  ✓ This step to create a new database.
  ✓ Now Click start >> all program >> Microsoft access 2003
  ✓ Select blank database from the task panel on the right – hand side of the screen.
  ✓ A dialog box is open and then give proper name for your database and after that click on create button.

❖ **What is MS-Access?**
  ✓ MS-Access means Microsoft access is a relational database management system from Microsoft that support all DBMS functionally like creating, updating, deleting, inserting data and etc.

❖ **What is extension of Ms-access?**
  ✓ Extension of the MS-Access database is ***.mdb.**

❖ **Introduction of database :-**
  • A database is a collection of related information.
  • A database contains records and fields. A record is a collection of different type of information about the same subject.
  • For example, a telephone book is an example of database. It contains related information about each person listed in it. His or her name, address and telephone number.

❖ **Explain data types of MS-Access:-**

  1) **Text**
  2) **Number**
  3) **Auto number**
  4) **Currency**
  5) **Boolean [YES/NO]**
  6) **Date / time**
  7) **Memo**
  8) **OLE object**
  9) **Hyperlink**
  10) **Lookup wizard**

I. **Text:-**
  ➤ It is a default data type of ms-access.
  ➤ Text data type support the alphabet field A to Z and it also support the numeric field 0 to 9 but which don't require any kind of calculation.

II. **Number:-**
   - ➢ It supports one number data 0 to 9 not character A to Z and basically.
   - ➢ This data type used for the mathematically calculation.
   - ➢ The size occupy the field is 1,2,4 on 8.

III. **Auto number**
   - ➢ It supports only number data like number data type.
   - ➢ But the limitation is that it assigns a random number when new record is added.

IV. **Currency:-**
   - ➢ Currency values and numeric data used in mathematical calculation involving data with 1 to 4 decimal points.
   - ➢ This field is used to note down currency information
     Example:- RS, Dollar

V. **Boolean [YES/NO]:-**
   - ➢ Its use to represents two optional value only yes/no then its.
   - ➢ It occupies only 1 bit size.
     Example:- Material status

VI. **Date / time**
   - ➢ This data type is used to enter the date and time.
   - ➢ Date and time field occupy the 8 bytes sizes.
   - ➢ Default format of date ID MM/DD/YYYY where M stands for month D stands for date and Y stands for year in four digit representation.
   - ➢ And time format is HH/MM/SS AM/PM where H stands for hour, M is number of minutes and S is the number of seconds.

VII. **Memo:-**
   - ➢ Like text data type it support the alphabet numeric data.
   - ➢ Basically if support the length text which length is up to 65,535 character.
   - ➢ Example:- if user was to store this or her full address with pin code. Number then user has to select MEMO data type.

VIII. **OLE Object:-**
   - ➢ OLE means object linking embedded.
   - ➢ This is use for embedded the object may Microsoft word document.
   - ➢ Microsoft excel spread sheet, graphical photos, sound or other binary data and linked in a Microsoft access table and it occupy the size 1 GB.

IX. **Hyperlink:-**
   - ➢ This data type is use to store the hyperlink address.
   - ➢ It can contain up to 2048 characters.

X. **Lookup wizard:-**
  ➢ It creates fields that allow user to choose a value from another table or from a list of value by using list box or combo box.
  ➢ Active this option starts the lookup wizard which creates a lookup fields.
  ➢ After you complete the wizard Microsoft already means access converts those fields.
  ➢ The same size as the primary key field used to perform the lookup, typically 4 bytes.

❖ **Create a database with different data types using wizard.**
  ➢ Now Click start >> all program >> Microsoft access 2003
  ➢ Select blank database from the task panel on the right – hand side of the screen.
  ➢ A dialog box is open and then give proper name for your database and after that click on create button
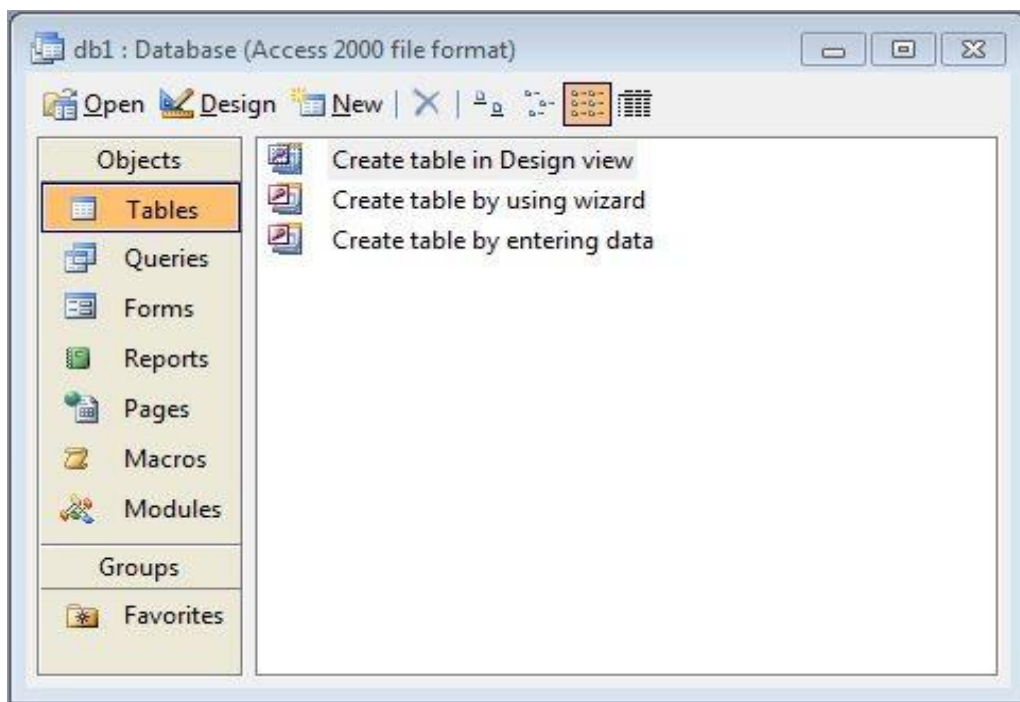

  ➢ Type a name for the database
  ➢ Click ok
  ➢ To open the new database click at the last database wizard dialog box.

❖ **Create a Relationship between two or more tables.**
  ➢ Relationship like information stored in separate stored in tables in a database. data in one table can be matched linked with data in the related table using field that both tables.
  ➢ In the Database window view at the title bar, click on Tools and Select Relationship.
  ➢ Select the table you want to link together, by clicking on them and selecting the submit button.

- Drag the primary key of the parent table and drop it into the same field in the child table.
- Select **Enforce refreshment integrity**.
  - When the cascade update related fields checkbox is set, changing a primary key value in the primary table automatically update the matching value in all related records.
  - When the cascade delete related record checkbox is set, deleting a record in the primary key table delete then any related records in the related will be delete.
- Click creates and save the relationship.
- Click to close window.
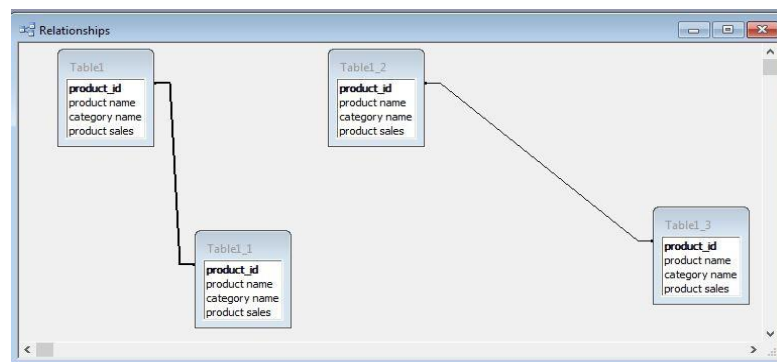
❖ **Create a Table to insert, delete, update record into database.**
- Open or create a database.
- Press F11 to Display the database window.
- Click Insert Table.
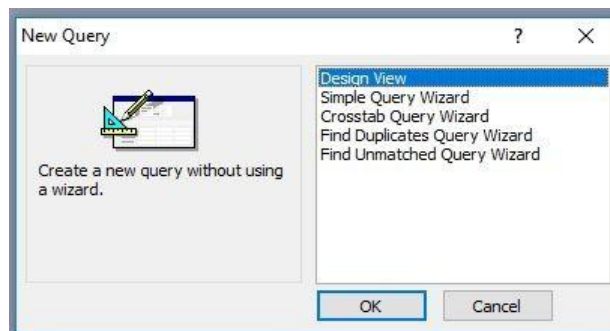

Delete Field from a table.
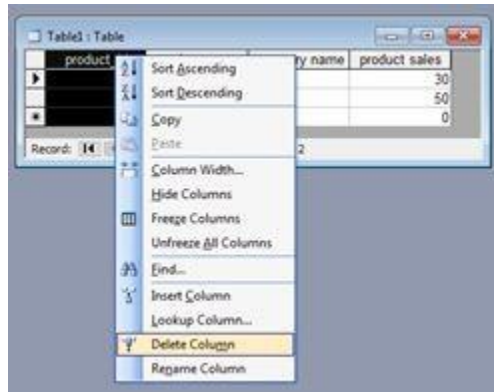
➤ open the table in datasheet view
➤ Right-click the column heading of the field to update.

❖ **Create a table Query With example.**
There are five type of query.
   1) Select Query
   2) Action Query
   3) Cross tab Query
      ✓ Make-Table Query
      ✓ Update Query
      ✓ Append Query
      ✓ Delete Query
   4) parameterized Queries
   5) SQL Queries

(1) Select Query:-

- There Queries are use to show the data with specific criteria (Ascending, Descending, or some Condition)
- A select query generates a logical table which is a sub set of the table.
- **Example:-** We have at student table with (Roll no, Stu_ name, Stu_ address) and we want to only roll no & Stu_ name which is of student table, for we have to use the select query.

**(2) Action Query:-** An action query that makes changes to or moves records in just one operation.

- ✓ there are **four** type:-
- (a) **Make-Table Query:-** These Query are use to build a new table with the help of result of a query.
- ✓ The field & criteria are use to develop a new table from query which are executed.
- ✓ Access prompts you for the name for the new table.
- (b) **Update Query:-** These queries are use to modify a existing data which are already story in table.
- ✓ For that in **OLE(Query by Example)** grid first you have to select a field of table then write a update value and then write criteria for updating.
- ✓ if the criteria will be match then updating is done.
- (c) **Append Query:-** An append query adds a group of records from one more table to the end of one or more tables.
- (d) **Delete Query:-** A delete Query deletes a group of records from one or more table.

3) Cross tab Query:-

- We use these queries to calculate and reseller data for the easy to analysis.
- cross tab queries calculate a count average, sum, or other type to total for data that is group by two type of information so for that we can use cross tab queries.

4) Parameterized Queries:-
- A parameter query is queries that display its own dialog box.
- Parameterized query are the query which require one or more parameter as input.
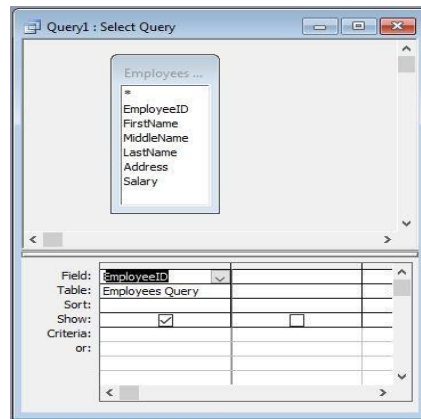
5) **SQL Query:-**
   - An SQL Query is a very which is creates using SQL statement.
   - for that structure Query language (SQL) use for update and manage database such as access.

❖ **What is Report? Write down step to create a report in MS-Access.**

- **Report:-**
  ➢ When we want to print out record which we have already entered in database for that user has to use the report object. with the help of the report, user can display the information the way we want to see that particular data format.
  ➢ So basically report is use for printing data of table or query which you select.

- **Step-1:-** Click on report object then new report wizard is open and clicks create by using wizard.

- **Step-2:-** the wizard's first window will appear in this window we have to introduce the field to be included in the report.

  - First we select **Table/Query** box for a report source, when you select any table on query then related fields, are display in below list.

  - Next we select that fields by clicking on the ⟩ button of simple double clicking on the field and if we mark mistake the click on ⟨ button the field will be removing from be first of selected fields.

  - We can select the entire field at the same time by clicking on ⟩⟩ button or deselect all the by clicking on ⟨⟨ button.

- **Step-3:-** Now click on next button, then we see screen in which select the grouping live within the report we can add a group header and footer and in group footer we will normally see the group total.

- **Step-4:-** Now We can see a layout wizard in this screen we select layout such as columnar and justified then click on next button.

- Now in next dialog box gives us style like BOLD, CASUAL, COMPAC etc.
- Select any one and then click on next button.
- Now save a report to the specific name and click on finish button.

I. **Report Wizards:-**
- The report wizard uses a wizard to guide us step by step through the creation of the report.

II. **Auto Report:-**
- Auto report consists of automatically creation of new report that contain all the data of the source table or queries.
- Auto report: Columnar presents each record on one page wise.
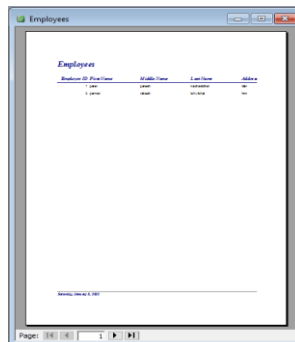
III. **Auto report wizard:-**
- Auto report: Tabular presents various records on the same page with a record in each row.

IV. **Chart wizard:-**
- The chart wizard uses an assistant that guides step by step through the creation of the graph.

V. **Label wizard:-**
- The label wizard an assistant that guides step by step through the creation of the graph.

- ❖ **Create a Project on Student Information System.**
  - ➢ Open Access database named student information
  - ➢ Start >> MS-Access
  - ➢ To select open command in file menu.
  - ➢ Select on student information and click on open.
  - ➢ Click on open.
  - ➢ Use additional table and prepare data entry for using form wizard.
  - ➢ Select table object named addition from student information.
  - ➢ Select form object in click on using wizard.
  - ➢ Then show the form wizard table.
  - ➢ Click on this >> button.
  - ➢ Select on "next" button.

- ➢ Select on column type.
- ➢ Select on sandstone style.
- ➢ click on next button
- ➢ Give the title of student entry and click on finish button.
- ➢ Enter to hypothical in the above table.
- ➢ Click navigation last record >> button.
- ➢ Click navigation > Button
- ➢ Then after enter 10 records.

❖ **Do Following using Different Navigation button.**
- ➢ Go to first record -> click on > button.
- ➢ Go to last record -> click on < button.
- ➢ Go to Forth record -> type on-> Then press enter key
- ➢ Edit city name in 7 records -> type on 7 -> Select city name -> click to delete tools from toolbar.
- ➢ Remove 5 Record -> type on 5 -> then press Enter key -> select record no -> Click on delete tools form toolbar.
- ➢ You select this record
- ➢ Click on yes button.

❖ **To prepare a report using report wizard.**
- ➢ All first should be maintaining record.
- ➢ Sorting is to be made on first name and middle name.
- ➢ It report layout as toolbar.
- ➢ Sorting report on student entry.
- ➢ Save report on Student Entry.

❖ Select Report object in student information database and double on wizard.
- • To show report wizard table.
- • Click on >> this Button
- • Click on next button
- • To select ascending from first name and last name.
- • Click on next button
- • Select tabular layout
- • Click on next button
- • Select or report style.
- • Give the title on student entry
- • Click on "Finish" Button.

Student Registration System

| Add Courses |
| Add Student |
| View Courses |
| View Student |
| Print Report |