

Practical No. 1

Aim: Overview, features and functionality. Application Development in MS-Access.

(i) Creating a new database and tables for the Student application.

• Opening MS Access

When you first start Access, you have the option of either opening an existing database or creating a new one. Access provides many ready-made databases for you to use and also several wizards to help you to quickly create a database.

• Creating a new database

i) Select the Blank Database button and press OK.

A window opens, asking you to select a folder and name for your database.

ii) Click the create button. The Student Database window opens. Every Access database has a database window. The window has buttons for each database object: Table, Queries, Forms, Reports, Pages, Macros and Modules. Table is the currently selected option.

iii) Select Create table in Design view option and click at New option.

iv) Select the Design view in the new window and click OK. The table design

window appears. Enter the field names and their data types in the table.

v) (Defining the Primary Key)
With the cursor in the row Roll No, right-click the mouse button and menu appears.

Saving the Table Structure:

vi) Save the table structure by pressing save button or by selecting File > Save As from the menu bar. Enter the name of table as student and click OK button.

vii) Click the Close item (X) in the top right corner to close the window. You will be returned to database window.

viii) In the database window, you will see that new table Student is now listed.

(ii) Create a query involving one table.

i) In the database window, click Queries and select Create Query in Design View and then click New.

ii) Double-click Design View to open the Show Table dialog box.

iii) With the table selected, click Add and then Close. A query window appears.

Selecting fields:

iv) The next step is to select the fields that you want to see in the query. We have

selected ROLLNO, NAME and MARKS fields.

The fields can be placed on the grid in a number of different ways:

> Double click the field name.

> Drag the field name from the table onto the top line of the query grid.

> Click the down arrow in the field cell in the query grid to display a list of field names from which you can select.

v) Double click ROLLNO, NAME and MARKS in turn to place them in the query grid.

vi) Click the Descending option in MARKS column to sort the student in descending order.

Running the Query :

vii) Click the Run button on the toolbar or by clicking Query > Run option. The query result appears.

Practical No. 2

Aim: Exercises on creation of Tables.

Sol. Tables are created using CREATE TABLE Command, This command is a part of DDL of SQL. This column names must be specified along the data types. Each table must have atleast one column. Tables are divided into rows and columns. Each row represents one piece of data and each column can be thought of representing a component of that piece of data. The syntax of CREATE TABLE command is

```
CREATE TABLE <Tablename> (
< column name > < datatype > [( < size > )],
< column name > < datatype > [( < size > )];
< column name > < datatype > [( < size > )] ... ]);
```

Inserting data into tables :

The Insert operation :

- Creates a new row (empty) in the database file.
- Loads the values passed (by the SQL Insert) into the column field.

The syntax is

```
INSERT INTO < Tablename >
VALUES ( < list of values > );
```


The word VALUES must precede the list of data to be inserted.

```
INSERT INTO Emp  
VALUES (10001, 'A. Williams', 'Production',  
1264 Staff Colony', 'Ammealabad', 'M', 16046);
```

While inserting data into tables, following points should be taken care of
i) Character data should be enclosed within quotes.

ii) Column values for data types of column is provided with single quotes.

iii) NULL values are given as NULL, without any quotes.

iv) If no data is available for all the columns then the column list must be included, then the table name.

To insert the employee Code, Name, Address, City, Sex and Salary, the following command is used.

```
INSERT INTO Emp (Ecode, Ename, Dept, Address,  
City, Sex, Salary)  
VALUES (10003, 'Iskita Sharma', 'RND',  
'44B Vitas Puri', 'New Delhi', 'F', 21565);
```