

Ch- 7 :: Database development (Basic)

1. What is SQL ?

It is Structure Query Language. It is a standard that every database user uses to communicate with and perform specific task .

2. Give names of any two RDBMS.

MYSQL, MS-ACCESS

3. What are different types of SQL commands available.

- a. DDL-DATA DEFINATION LANGUAGE Eg.- CREATE ,ALTER,DROP
- b. DML-DATA MANIPULATION LANGUAGUE Eg.. UPDATE,DELETE
- c. TCL-TRANSCATION CONTROL LANGUAGE Eg. COMMIT,ROLLBACK
- d. DCL-DATA CONTROL LANGUAGE Eg. GRANT,REVOKE

4. What is the difference between DDL and DML Commands?

DDL statements are used for creating and defining the Database structure. DML statements are used for managing data within Database.

5. What is a Primary key in a table ?

A Primary key is a column in a table which consists of unique values i.e. it cannot have duplicate values or null values. (null – no value). For example in a table school admission number can be a primary key as it is must and unique for all students.

6. What is Foreign key in a database?

In the context of relational databases, a foreign keys a field (or collection of fields) in one table that uniquely identifies a row of another table or the same table. In simpler words, the foreign key is defined in a second table, but it refers to the primary key or a unique key in the first table

7. What do you mean by Queries , table and Reports in respect to database.

- a. **Queries** – A **query** is a request for data or information from a **database** table or combination of tables.
- b. **Table**- It consists of columns, and rows.It is also called as relation in database.
- c. **Report- Reports** are a great way to organize and present data from your database. The data in a preview or in a printed **report** is static. **Reports** merely present the data; they do not alter the underlying data in the tables. Each time a **report** is opened, database access displays the most recent data.
- d. **Forms**-a **form** is a window or screen that contains numerous fields, or spaces to enter data. Each field holds a field label so that any user who views the **form** gets an idea of its contents. A **form** is more user friendly than generating queries to create tables and insert data into fields.
- e. **Macros**- they are mini-programs that automate custom tasks.Macros are a simple way to get custom results without becoming a programmer.

8. What are the components of database?

- a. **Table**-also called as relation
- b. **Column**-also called as attribute/field/ degree
- c. **Row**- also called as tuple/record/cardinality
- d. **Data** also called as value.

9. What are two ways for creating Query?

Query can be created in two ways – Query Wizard or Query Design method.

10. How can you define criteria while creating Queries ?

This holds the conditions on the basis of which the records will be filtered in the query output. For example >50 is a criteria condition.

11. How can we generate the report in Ms –access database ?

There are two ways for this – Use of Report command and use of report wizard.

12. Which type of data type is used to holds the combination of text and numbers as hyperlink address?
Hyperlink datatype.

13. Which data type accepts only two values?

Yes/ No

14. Do we need to save the data in database ?

No it is automatically save in the database when we enter data.

15. How many Autonumber datatype can appear in a table in database?

Only one Autonumber datatype is allowed.

16. What do you mean by the default view ?

Default value refers to the preexisting value for a particular column. If a user forgets or skip the value of some column than default value will be presented in that particularr column. (if default defined)

17. What is the difference between char and varchar datatype of SQL?

A CHAR field is a fixed length, and VARCHAR is a variable length field. This means that the storage requirements are different - a CHAR always takes the same amount of space regardless of what you store, whereas the storage requirements for a VARCHAR vary depending on the specific string stored.

FOR WRITING SQL QUERIES :

- SQL statements are not case sensitive.
- Place a semicolon (;) at the end of the last clause.
- SQL statements can be on one or more lines.
- Keywords cannot be abbreviated or split across lines.
- Clauses are usually placed on separate lines.
- Tabs and indents are used to enhance readability.

The general form is :

SELECT COLUMN NAME....

FROM TABLE NAME

WHERE CONDITION;

EXAMPLE : TABLE NAME IS STUDENT

ROLLNO	NAME	MARKS1	MARKS2
1	RAJ	54	66
2	RAM	44	77
3	ROSHNI	77	79
4	ROHAN	23	98

Write MYSQL Queries for the following :

1. To create the given table.
2. To display all the data from table.

3. To display only name and marks 1 from table.
4. To display marks1 and marks2 from the table whose Rollno is greater than 2.
5. To insert one more row as (5,"resham",55,76)
6. To delete the record of those students who are having marks1 less than30.
7. To update the marks1 as 49 of those students who secured marks less than 30.

Answers :

1. CREATE TABLE STUDENT
(ROLLNO INTEGER(20),
NAME CHAR(20),
MARKS1 INTEGER(4),
MARKS2 INTEGER(4));
2. SELECT * FROM STUDENT;
3. SELECT NAME,MARKS1 FROM STUDENT;
4. SELECT MARKS1,MARKS2 FROM STUDENT WHERE ROLLNO >2;
5. INSERT INTO STUDENT VALUES(5,RESHAM,55,76);
6. DELETE FROM STUDENT WHERE MARKS1<30;
7. UPDATE STUDENT
SET MARKS1=49
WHERE MARKS<30;