SYIT Sem III Database Management System Practical #2

Practical 2: Manipulating Data

DML (Data Manipulation Language)
Commands

1.insert command

2.select command

3.update command

4.delete command

Create table command

Syntax:

create table <tablename>
 (<columnname1> < datatype>
 (<size>), <columnname2>
 <datatype> (<size>)

Example:

- create table emp(eid int,ename char(20),eadd char(20),esal int,edept char(20))
- o/p:
- table created

1.Insert command

Syntax:

INSERT INTO table_name (column1, column2, column3, ...) VALUES (value1, value2, value3, ...);

Or

INSERT INTO table_name VALUES (value1,
value2, value3, ...);

ex.

insert into emp
values(1,'neha','vashi',10000,'HR')

o/p:

1 row(s) inserted.

insert into emp
values(2,'nita','panvel',20000,'admin')

2.Viewing data in the table(Select command)

| syntax: | | | | | | | |
|---|--------|---------|-------|-------|--|--|--|
| select * from <tablelename></tablelename> | | | | | | | |
| ex. | | | | | | | |
| select * from emp | | | | | | | |
| o/p: | | | | | | | |
| EID | ENAM | E EADD | ESAL | EDEPT | | | |
| 1 | neha | vashi | 10000 | HR | | | |
| 2 | nita | panvel | 20000 | admin | | | |
| 3 | priya | dadar | 30000 | sales | | | |
| 4 | raj | andheri | 40000 | HR | | | |
| 5 | nitesh | bandra | 50000 | HR | | | |

Select command contd...

Three ways

i)Selected columns and all rows

ii)selected rows and all columns

iii)selected columns and selected rows

i)Selected columns and all rows

Syntax:

select <columnname1>,<Columnname2> from <tablename>

Query:

select eid,ename,esal from emp

Output:

EID ENAME ESAL

- 1 neha 10000
- 2 nita 20000
- 3 priya 30000
- 4 raj 40000
- 5 nitesh 50000

ii)selected rows and all columns

Syntax:

select * from <tablename> where <condition>

Query:

select * from emp where eid=2

Output:

```
EID ENAME EADD ESAL EDEPT 2 nita panvel 20000 admin
```

iii)selected columns and selected rows

Syntax:

select <columnname1>,<columnname2> from <tablename> where <condition>

Query:

select ename, eadd, edept from emp where eid=2

Output:

ENAME EADD EDEPT nita panvel admin

3) Update command

Syntax:

UPDATE table_name SET column1 = value1,
column2 = value2, ...WHERE condition;

Two ways:

- i)updation all rows
- ii)updating records conditionally

i) updation all rows

- Syntax:
- update <tablename> set <columnname> = <expression>
- ex.
- update emp set esal=70000
- o/p:
- All rows updated

Example

- select * from emp
- o/p:
- EID ENAME EADD ESAL EDEPT
- 1 neha vashi 70000 HR
- 2 nita panvel 70000 admin
- 3 priya dadar 70000 sales
- 4 raj andheri 70000 HR
- 5 nitesh bandra 70000 HR

ii)updating records conditionally

Syntax:

- update <tablename> set <columnname> =<expression>
 where <condition>
- ex.
- update emp set esal=80000 where eid=3
- o/p:
- 1 row updated

Example

- select * from emp
- EID ENAME EADD ESAL EDEPT
- 1 neha vashi 70000 HR
- 2 nita panvel 70000 admin
- 3 priya dadar 80000 sales
- 4 raj andheri 70000 HR
- 5 nitesh bandra 70000 HR

4) Delete command

Syntax:

DELETE FROM table_name [.WHERE
condition];

- i)removal of all rows
- ii)removal of specific rows

i)removal of all rows

- syntax: delete from <tablename>
- eg.
- delete from emp
- o/p:
- all rows deleted

ii)removal of specific rows

Syntax:

- delete from emp where <condition>
- eg.
- delete from emp where eid=3
- o/p:
- 1 row deleted

Exercise 1: Table Employee

| empno | ename | Job | salary | Deptid |
|-------|---------|-----------|--------|--------|
| 1 | John | Clerk | 1000 | 10 |
| 2 | Maria | Manager | 1400 | 20 |
| 3 | Lara | President | 2000 | 30 |
| 4 | Fedrick | Officer | 1300 | 40 |
| 5 | Meera | Clerk | 1000 | 10 |
| 6 | Anita | Manager | 1400 | 10 |

Questions:

1) Write a query to create table Employee

--create table Employee(empno int primary key,ename varchar(10),job char(10),salary int,deptid int)

2) Write a query to insert values in Employee table.

--insert into emp values(1,'John','clerk',1000,10)

- 3) Display details of employee table
 - --Select * from emp
- 4) Write an query to change 'Job' of an Employee No.
- 1 to 'Accountant'.
- --Update Employee set job='Accountant' where empno=1
- 5) List the name, job and salary of all employees in department 20
- --Select ename, job, salary from Employee where deptid=20

Table: Client_master

| ClientNo | Cname | CCity | State | BalDue |
|----------|--------|-------------|-----------------|--------|
| C001 | Ivan b | Mumbai | Maharashtra | 1500 |
| C002 | Mamta | Pune | Maharashtra | 2500 |
| C003 | Ram | Navi Mumbai | Maharashtra | 5000 |
| C004 | Shyam | Banglore | Aandhra Pradesh | 2000 |
| C005 | Raj | Surat | Gujrat | 0 |
| C006 | Leena | Jaipur | Rajsthan | 2600 |
| C007 | Neena | Madras | Aandhra Pradesh | 2600 |
| C008 | Nita | Navi Mumbai | Maharashtra | 3000 |

Queries:

- 1. Write create table query for above Client_master database.
- 2. Write insert query for to insert the above given records into Client master table.
- 3. Display information of all clients present in the Client_Master table.
- 4. Display Clients name and city of all clients.
- 5. Change the city of ClientNo 'C005' to 'Banglore'
- 6. Display detalis of client no 6.
- 7. Add column Pincode to above table.
- 8. Change size of the State column to 30.
- 9. Delete the details of client having client no as C008.
- 10. Delete the details of clients staying in the city of Maharashtra.

Thank you!!