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**ROLL NO:58**

**BRANCH:AIDS**

**Practical No. 3**

**Aim: Perform select queries using predicates**

**Q.**1 **Create LOCATION Table with columns Location\_Id, Regional\_Group.**

**Constraints on LOCATION table: Location\_Id Primary Key.**

**SOLN:-**

CREATE TABLE LOCATION (

Location\_Id INT PRIMARY KEY,

Regional\_Group VARCHAR(255)

);

**2. Insert the following records into the table LOCATION:**

**LOCATION\_ID REGIONAL\_GROUP**

**------------- ------------------------------**

**122 NEW YORK**

**123 DALLAS**

**124 CHICAGO**

**167 BOSTON**

**SOLN:-**

INSERT INTO LOCATION (Location\_Id, Regional\_Group)

VALUES (122, 'NEW YORK'), (123, 'DALLAS'), (124, 'CHICAGO'),

(167, 'BOSTON');

Q**. 3 Create DEPARTMENT Table with columns Department\_Id, Name, Location\_ID.**

**Constraints on DEPARTMENT table: Department\_Id Primary Key, Location\_Id references LOCATION table.**

**SOLN:-**

CREATE TABLE DEPARTMENT (

Department\_Id INT PRIMARY KEY, Name VARCHAR(255), Location\_Id INT,

FOREIGN KEY (Location\_Id) REFERENCES LOCATION(Location\_Id));

**Q. 4 Insert the following records into DEPARTMENT table:**

**DEPRATMEMT\_ID NAME LOCATION\_ID**

**------------------------ --------------------- ---------------------**

**10 ACCOUNTING 122**

**20 RESEARCH 124**

**30 SALES 123**

**40 OPERATIONS 167**

**SOLN:-**

INSERT INTO DEPARTMENT (DEPARTMENT\_ID, NAME, LOCATION\_ID)

VALUES

(10, 'ACCOUNTING', 122),

(20, 'RESEARCH', 124),

(30, 'SALES', 123),

(40, 'OPERATIONS', 167);

Q. 5 Create JOB Table with columns Job\_Id, Funcation.

Constraints on JOB table: Job\_ID Primary Key.

**SOLN:-**

CREATE TABLE JOB (

Job\_Id INT PRIMARY KEY,

FUNC VARCHAR(50)**);**

**Q. 6 Insert the following records into JOB table:**

**JOB\_ID FUNCTION**

**------------------ -------------------**

**667 CLERK**

**668 STAFF**

**669 ANALYST**

**670 SALESPERSON**

**671 MANAGER**

**672 PRESIDENT**

**SOLN:-**

INSERT INTO JOB (JOB\_ID, FUNC)

VALUES

(667, 'CLERK'),(668, 'STAFF'),(669, 'ANALYST'), (670, 'SALESPERSON'), (671, 'MANAGER'),

(672, 'PRESIDENT');

**Q. 7 Create EMPLOYEE Table with columns Employee\_Id, Last\_Name,First\_Name, Middle\_Name, Job\_Id, Manager\_Id, Hire\_Date, Salary, Comm, Department\_ID.**

**Constraints on EMPLOYEE table: Employee\_Id Primary Key, Last\_Name NotNull, Department\_Id references DEPARTMENT table.**

**SOLN:-**

CREATE TABLE EMPLOYEE (

Employee\_Id INT PRIMARY KEY, Last\_Name VARCHAR(50) NOT NULL,

First\_Name VARCHAR(50),Middle\_Name VARCHAR(50), Job\_Id INT,

Manager\_Id INT, Hire\_Date DATE, Salary DECIMAL(10,2), Comm DECIMAL(10,2),

Department\_Id INT,

FOREIGN KEY (Department\_Id) REFERENCES DEPARTMENT (Department\_Id)

);

**8. Insert the following records into EMPLOYEE table:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Employee\_Id | Last\_Name | First\_Name | Middle\_Name | Job\_Id | Manager\_Id | Hire\_Date | Salary | Comm | Department\_ID |
| 7369 | SMITH | JOHN | Q | 667 | 7902 | 17-DEC-84 | 800 | NULL | 20 |
| 7499 | ALLEN | KEVIN | J | 670 | 7698 | 20-FEB-85 | 1600 | 300 | 30 |
| 7505 | DOYLE | JEAN | K | 671 | 7839 | 04-APR-85 | 2850 | NULL | 30 |
| 7506 | DENNIS | LYNN | S | 671 | 7839 | 15-MAY-85 | 2750 | NULL | 30 |
| 7507 | BAKER | LESLIE | D | 671 | 7839 | 10-JUN-85 | 2200 | NULL | 40 |
| 7521 | WARK | CYNTHIA | D | 670 | 7698 | 22-FEB-85 | 1250 | 500 | 30 |

**SOLN:-**

INSERT INTO EMPLOYEE (Employee\_Id, Last\_Name, First\_Name, Middle\_Name, Job\_Id, Manager\_Id, Hire\_Date, Salary, Comm, Department\_Id)

VALUES

(7369, 'SMITH', 'JOHN', 'Q', 667, 7902, TO\_DATE('17-DEC-84', 'DD-MON-YY'), 800, NULL, 20),

(7499, 'ALLEN', 'KEVIN', 'J', 670, 7698, TO\_DATE('20-FEB-85', 'DD-MON-YY'), 1600, 300, 30),

(7505, 'DOYLE', 'JEAN', 'K', 671, 7839, TO\_DATE('04-APR-85', 'DD-MON-YY'), 2850, NULL, 30),

(7506, 'DENNIS', 'LYNN', 'S', 671, 7839, TO\_DATE('15-MAY-85', 'DD-MON-YY'), 2750, NULL, 30),

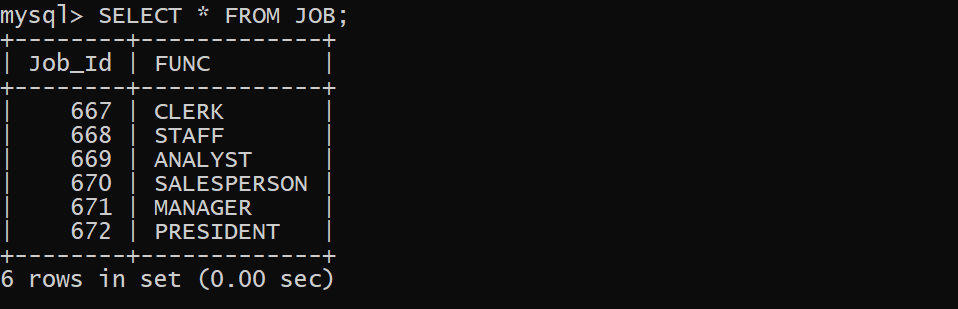
(7507, 'BAKER', 'LESLIE', 'D', 671, 7839, TO\_DATE('10-JUN-85', 'DD-MON-YY'), 2200, NULL, 40),

(7521, 'WARK', 'CYNTHIA', 'D', 670, 7698, TO\_DATE('22-FEB-85', 'DD-MON-YY'), 1250, 500, 30);

**Perform the following queries on the above tables:**

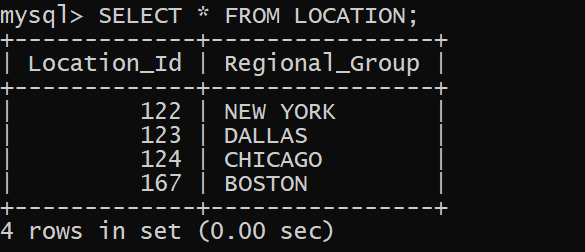
1. List all job details.

**SELECT \* FROM JOB;**

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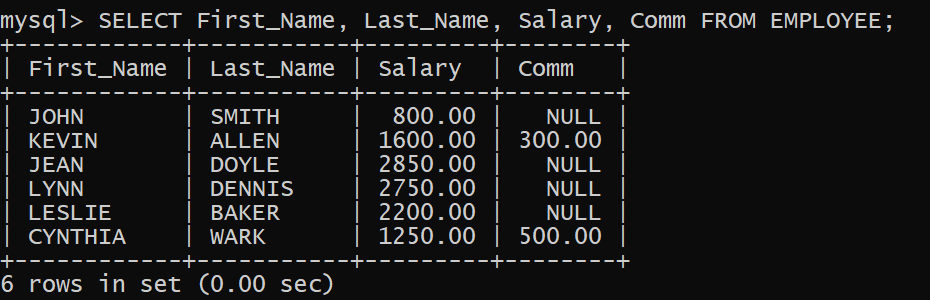
1. List all the locations.

**SELECT \* FROM LOCATION;**



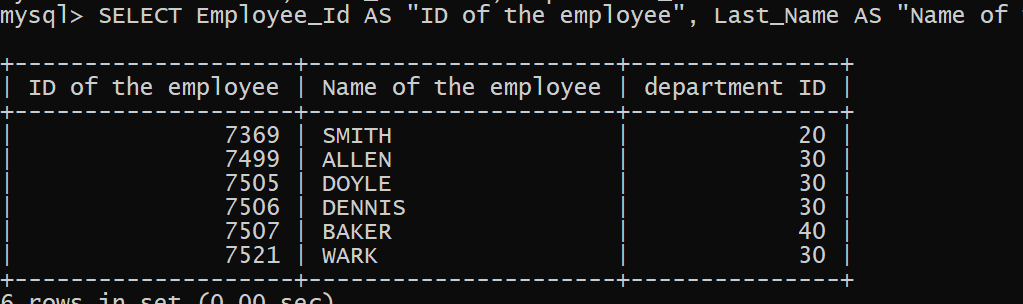
1. List out first name,last\_name,salary, commission for all employees.

**SELECT First\_Name, Last\_Name, Salary, Comm FROM EMPLOYEE;**

****

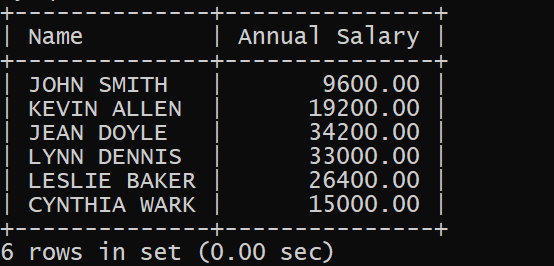
1. List out employee\_id,last\_name,department\_id for all employees and rename employee\_id as “ID of the employee”, last\_name as “Name of the employee”, department\_id as “department ID”.

SELECT Employee\_Id , Last\_Name , department ID FROM EMPLOYEE;



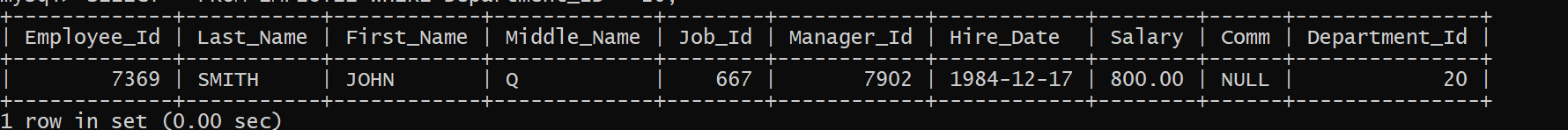
1. List out the employee’s annual salary with their names only.

**SELECT CONCAT(First\_Name, ' ', Last\_Name) AS "Name", Salary\*12 AS "Annual Salary" FROM EMPLOYEE;**



1. List out the employees who are working in department 20.

**SELECT \* FROM EMPLOYEE WHERE Department\_ID = 20;**

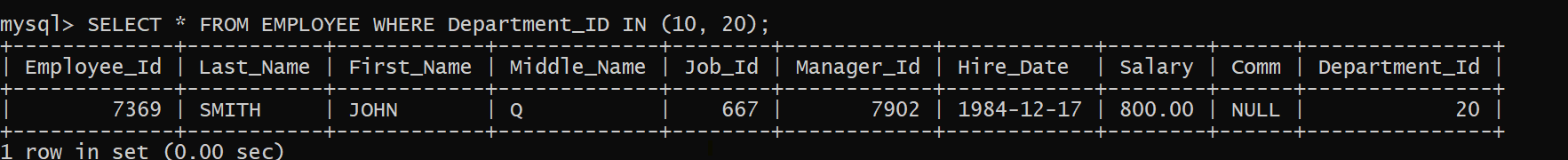
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1. List out the employees who are earning salary between 3000 and 4500.

SELECT \* FROM EMPLOYEE WHERE Salary BETWEEN 3000 AND 4500;

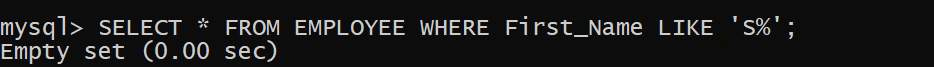
1. List out the employees who are working in department 10 or 20.

**SELECT \* FROM EMPLOYEE WHERE Department\_ID IN (10, 20);**



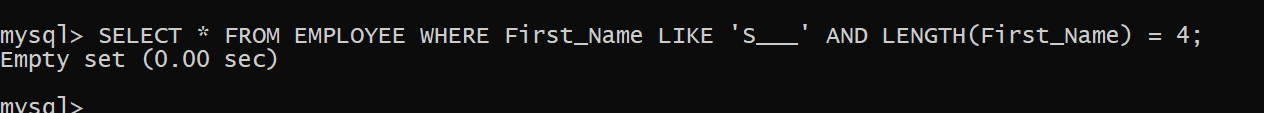
1. List out the employees whose name starts with “S”.

**SELECT \* FROM EMPLOYEE WHERE First\_Name LIKE 'S%';**

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1. List out the employees whose name length is 4 and start with “S”

**SELECT \* FROM EMPLOYEE WHERE First\_Name LIKE 'S\_\_\_' AND LENGTH(First\_Name) = 4;**



**Conclusion:- we Perform select queries using predicates**