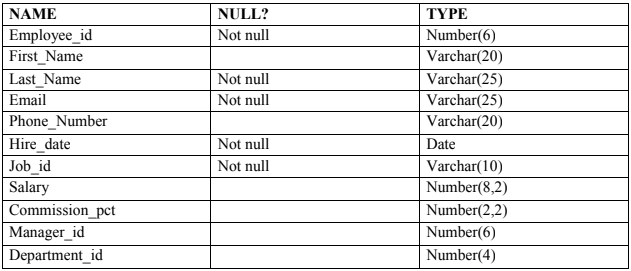
**EXPERIMENT:2**

**DATE:5.08.2024**

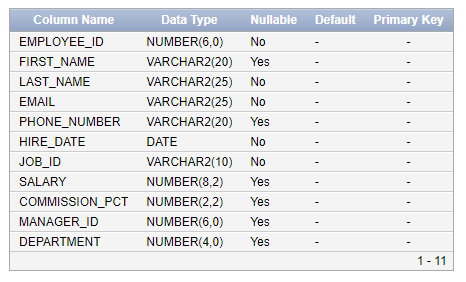
**DATA MANIPULATIONS**

Create the following tables with the given structure.

**EMPLOYEES TABLE**



create table EMPLOYEES(EMPLOYEE\_ID Number(6) Not null, FIRST\_NAME Varchar(20),LAST\_NAME Varchar(25) Not null, EMAIL Varchar(25)  Not null, PHONE\_NUMBER Varchar(20),HIRE\_DATE Date Not null , JOB\_ID Varchar(10) not null, SALARY Number(8,2),COMMISSION\_PCT Number(2,2),MANAGER\_ID Number(6),DEPARTMENT Number(4));



INSERT INTO Employees (EMPLOYEE\_ID, FIRST\_NAME, LAST\_NAME, EMAIL, PHONE\_NUMBER, HIRE\_DATE, JOB\_ID, SALARY, COMMISSION\_PCT, MANAGER\_ID, DEPARTMENT) VALUES

(1, 'PRIYA', 'MOHAN', 'priya@gamil.com', 'IN001', TO\_DATE('09/22/2004', 'MM/DD/YYYY'), 'CS001', 53453, 0.2, 100, 60),

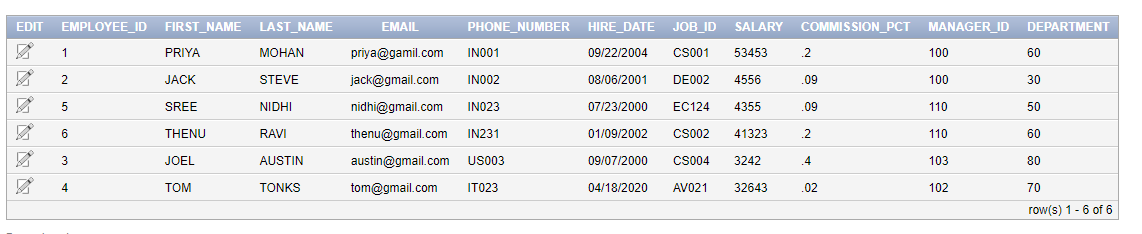
(2, 'JACK', 'STEVE', 'jack@gmail.com', 'IN002', TO\_DATE('08/06/2001', 'MM/DD/YYYY'), 'DE002', 4556, 0.09, 100, 30),

(5, 'SREE', 'NIDHI', 'nidhi@gmail.com', 'IN023', TO\_DATE('07/23/2000', 'MM/DD/YYYY'), 'EC124', 4355, 0.09, 110, 50),

(6, 'THENU', 'RAVI', 'thenu@gmail.com', 'IN231', TO\_DATE('01/09/2002', 'MM/DD/YYYY'), 'CS002', 41323, 0.2, 110, 60),

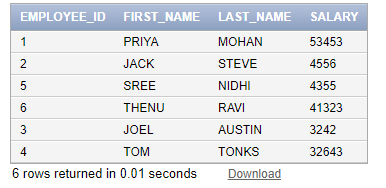
(3, 'JOEL', 'AUSTIN', 'austin@gmail.com', 'US003', TO\_DATE('09/07/2000', 'MM/DD/YYYY'), 'CS004', 3242, 0.4, 103, 80),

(4, 'TOM', 'TONKS', 'tom@gmail.com', 'IT023', TO\_DATE('04/18/2020', 'MM/DD/YYYY'), 'AV021', 32643, 0.02, 102, 70);



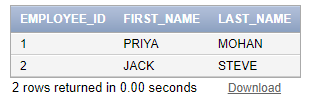
1. Find out the employee id, names, salaries of all the employees

SELECT Employee\_id, First\_Name, Last\_Name, Salary FROM EMPLOYEES;



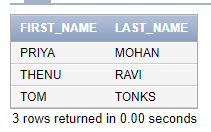
(b) List out the employees who works under manager 100

SELECT Employee\_id, First\_Name, Last\_Name FROM EMPLOYEES WHERE Manager\_id = 100;



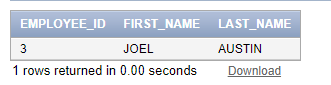
(c) Find the names of the employees who have a salary greater than or equal to 4800

SELECT First\_Name, Last\_Name FROM EMPLOYEES WHERE Salary >= 4800;



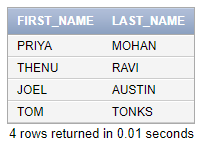
(d) List out the employees whose last name is ̳AUSTIN‘

SELECT Employee\_id, First\_Name, Last\_Name FROM EMPLOYEES WHERE Last\_Name = 'AUSTIN';



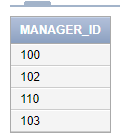
(e) Find the names of the employees who works in departments 60,70 and 80

SELECT First\_Name, Last\_Name FROM EMPLOYEES WHERE Department\_id IN (60, 70, 80);



(f ) Display the unique Manager\_Id.

SELECT DISTINCT Manager\_id FROM EMPLOYEES WHERE Manager\_id IS NOT NULL;



Create an Emp table with the following fields: (EmpNo, EmpName, Job,Basic, DA, HRA,PF,

GrossPay, NetPay) (Calculate DA as 30% of Basic and HRA as 40% of Basic)

CREATE TABLE EMP1 (

EmpNo INT PRIMARY KEY, EmpName VARCHAR(100), Job VARCHAR(50),

Basic DECIMAL(10, 2),

DA DECIMAL(10, 2),

HRA DECIMAL(10, 2),

PF DECIMAL(10, 2),

GrossPay DECIMAL(10, 2),

NetPay DECIMAL(10, 2)

);

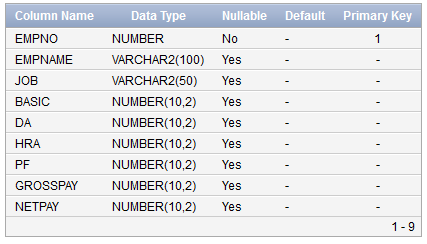
UPDATE Emp1

SET DA = Basic \* 0.30,

HRA = Basic \* 0.40,

GrossPay = Basic + DA + HRA,

NetPay = GrossPay - PF;



1. Insert Five Records and calculate GrossPay and NetPay.

INSERT INTO emp1 (EMPNO, EMPNAME, JOB, BASIC, PF) VALUES

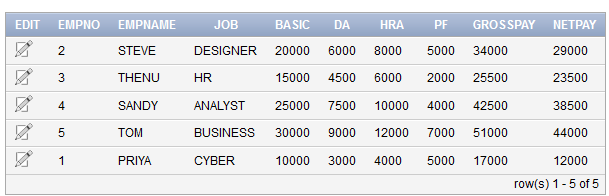
(2, 'STEVE', 'DESIGNER', 20000, 5000),

(3, 'THENU', 'HR', 15000, 2000),

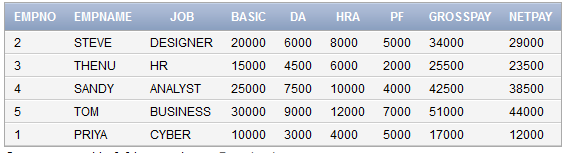
(4, 'SANDY', 'ANALYST', 25000, 4000),

(5, 'TOM', 'BUSINESS', 30000, 7000),

(1, 'PRIYA', 'CYBER', 10000, 5000);

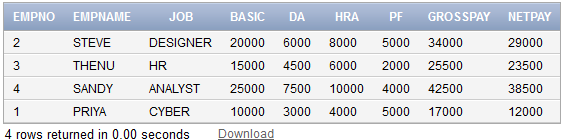


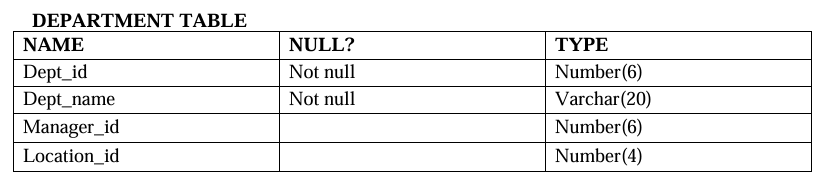
(b) Display the employees whose Basic is lowest in each department.

SELECT EmpNo, EmpName, Job, Basic, DA, HRA, PF, GrossPay, NetPay FROM Emp1 WHERE (Job, Basic) IN (SELECT Job, MIN(Basic) FROM Emp1 GROUP BY Job);

( c ) If Net Pay is less than 40000

SELECT EmpNo, EmpName, Job, Basic, DA, HRA, PF, GrossPay, NetPay FROM Emp1 WHERE NetPay < 40000;





CREATE TABLE Department (

Dept\_id NUMBER(6) NOT NULL,

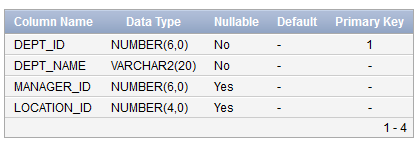
Dept\_name VARCHAR2(20) NOT NULL,

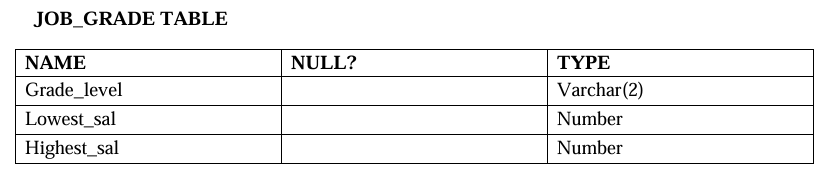
Manager\_id NUMBER(6),

Location\_id NUMBER(4),

PRIMARY KEY (Dept\_id)

);





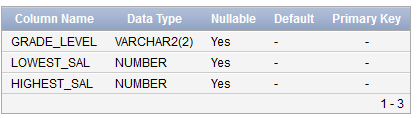
CREATE TABLE JOB\_GRADE (

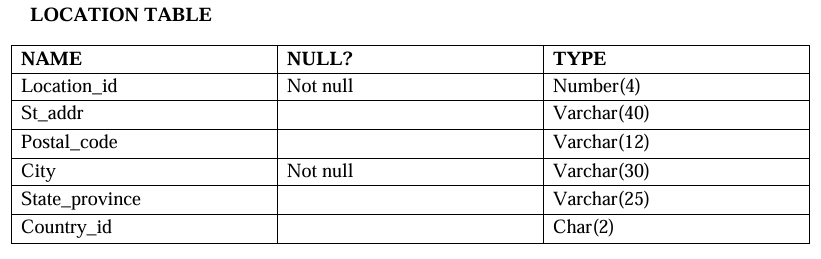
Grade\_level VARCHAR2(2),

Lowest\_sal NUMBER,

Highest\_sal NUMBER

);





CREATE TABLE LOCATION (

Location\_id NUMBER(4) NOT NULL,

St\_addr VARCHAR2(40),

Postal\_code VARCHAR2(12),

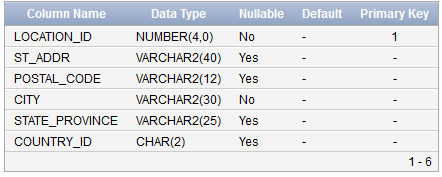
City VARCHAR2(30) NOT NULL,

State\_province VARCHAR2(25),

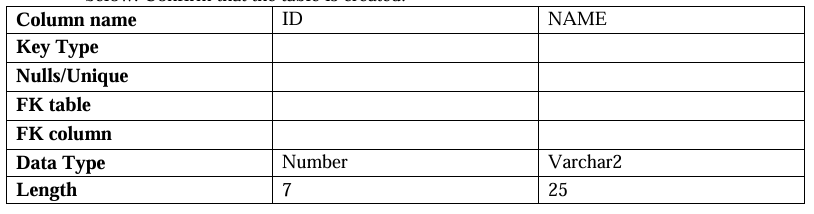
Country\_id CHAR(2),

PRIMARY KEY (Location\_id)

);



1. Create the DEPT table based on the DEPARTMENT following the table instance chart below. Confirm that the table is created.



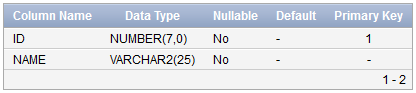
CREATE TABLE DEPT1 (

ID NUMBER(7) NOT NULL,

NAME VARCHAR2(25) NOT NULL,

PRIMARY KEY (ID)

);

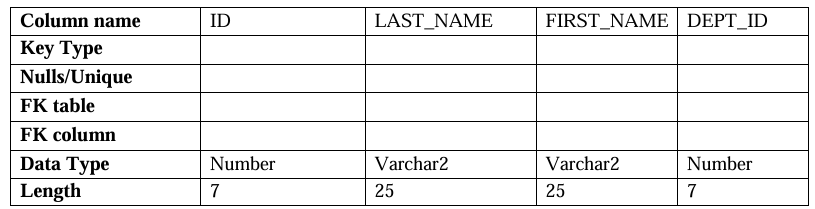


SELECT table\_name

FROM user\_tables

WHERE table\_name = 'DEPT1';

1. Create the EMP table based on the following instance chart. Confirm that the table is created.



CREATE TABLE EMP2 (

ID NUMBER(7) NOT NULL,

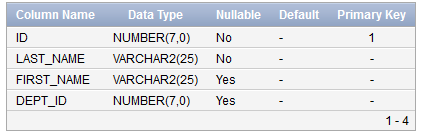
LAST\_NAME VARCHAR2(25) NOT NULL,

FIRST\_NAME VARCHAR2(25),

DEPT\_ID NUMBER(7),

PRIMARY KEY (ID)

);



SELECT table\_name

FROM user\_tables

WHERE table\_name = 'EMP';

3 Modify the EMP table to allow for longer employee last names. Confirm the modification.(Hint: Increase the size to 50)

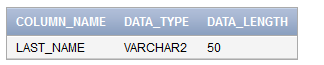
ALTER TABLE EMP2 MODIFY (LAST\_NAME VARCHAR2(50));

SELECT column\_name, data\_type, data\_length

FROM user\_tab\_columns

WHERE table\_name = 'EMP2'

AND column\_name = 'LAST\_NAME';



4 Create the EMPLOYEES2 table based on the structure of EMPLOYEES table. Include Only the Employee\_id, First\_name, Last\_name, Salary and Dept\_id coloumns. Name the columns Id, First\_name, Last\_name, salary and Dept\_id respectively.

CREATE TABLE EMPLOYEES2 (

Id NUMBER(6) PRIMARY KEY, -- Corresponds to Employee\_id

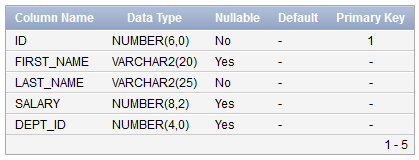
First\_name VARCHAR2(20), -- Corresponds to First\_Name

Last\_name VARCHAR2(25) NOT NULL, -- Corresponds to Last\_Name

salary NUMBER(8, 2), -- Corresponds to Salary

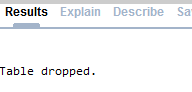
Dept\_id NUMBER(4) -- Corresponds to Department\_id

);



5 Drop the EMP table.

DROP TABLE EMP2;



6 Rename the EMPLOYEES2 table as EMP.

ALTER TABLE EMPLOYEES2 RENAME TO EMP2;



7 Add a comment on DEPT and EMP tables. Confirm the modification by describing the table.

COMMENT ON TABLE DEPT1 IS 'Department details';

COMMENT ON TABLE EMP2 IS 'Employee details';

SELECT table\_name, comments

FROM user\_tab\_comments

WHERE table\_name IN ('DEPT1', 'EMP2');



8 Drop the First\_name column from the EMP table and confirm it.

ALTER TABLE EMP DROP COLUMN FIRST\_NAME;

SELECT column\_name

FROM user\_tab\_columns

WHERE table\_name = 'EMP2';

