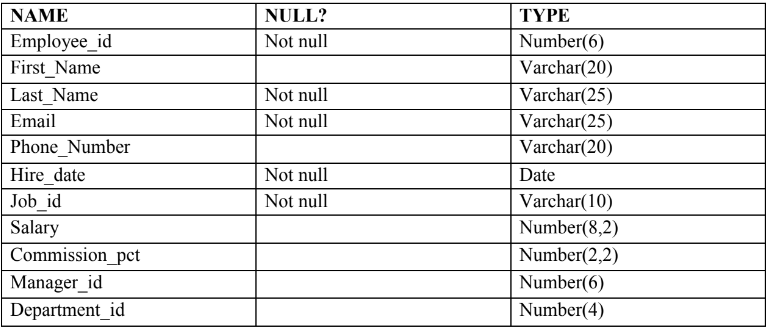
**EXPERIMENT: 2**

**DATE:**

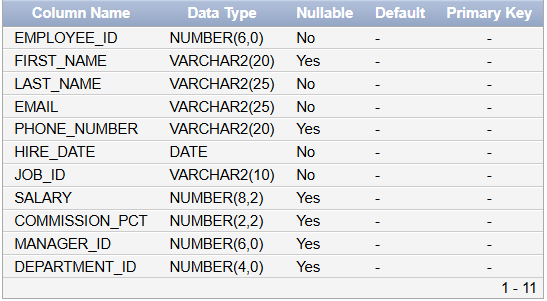
**DATA MANIPULATIONS**

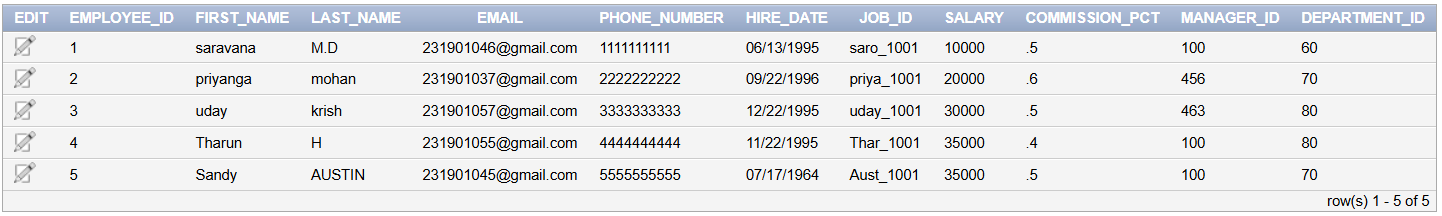
**Create the following tables with the given structure.**

**EMPLOYEES TABLE**

****

create table EMPLOYEE(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\_id Number(4));

****

****

**INSERT INTO employees (employee\_id, first\_name, last\_name, email, phone\_number, hire\_date, job\_id, salary, commission\_pct, manager\_id, department\_id)**

**VALUES (1, 'saravana', 'M.D', '231901046@gmail.com', '1111111111', TO\_DATE('1995-06-13', 'YYYY-MM-DD'), 'saro\_1001', 10000, 0.5, 100, 60);**

**INSERT INTO employees (employee\_id, first\_name, last\_name, email, phone\_number, hire\_date, job\_id, salary, commission\_pct, manager\_id, department\_id)**

**VALUES (2, 'priyanga', 'mohan', '231901037@gmail.com', '2222222222', TO\_DATE('1996-09-22', 'YYYY-MM-DD'), 'priya\_1001', 20000, 0.6, 456, 70);**

**INSERT INTO employees (employee\_id, first\_name, last\_name, email, phone\_number, hire\_date, job\_id, salary, commission\_pct, manager\_id, department\_id)**

**VALUES (3, 'uday', 'krish', '231901057@gmail.com', '3333333333', TO\_DATE('1995-12-22', 'YYYY-MM-DD'), 'uday\_1001', 30000, 0.5, 463, 80);**

**INSERT INTO employees (employee\_id, first\_name, last\_name, email, phone\_number, hire\_date, job\_id, salary, commission\_pct, manager\_id, department\_id)**

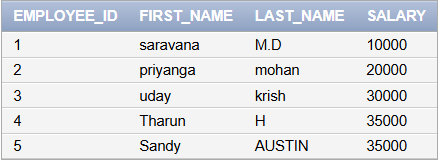
**VALUES (4, 'Tharun', 'H', '231901055@gmail.com', '4444444444', TO\_DATE('1995-11-22', 'YYYY-MM-DD'), 'Thar\_1001', 35000, 0.4, 100, 80);**

**INSERT INTO employees (employee\_id, first\_name, last\_name, email, phone\_number, hire\_date, job\_id, salary, commission\_pct, manager\_id, department\_id)**

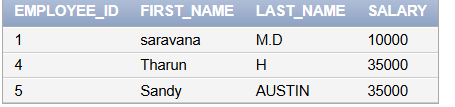
**VALUES (5, 'Sandy', 'AUSTIN', '231901045@gmail.com', '5555555555', TO\_DATE('1964-07-17', 'YYYY-MM-DD'), 'Aust\_1001', 35000, 0.5, 100, 70);**

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

SELECT  
    employee\_id,  
    first\_name,  
    last\_name,  
    salary  
FROM  
    employee;

****

1. **List out the employees who works under manager 100**



**SELECT**

**employee\_id,**

**first\_name,**

**last\_name,**

**salary**

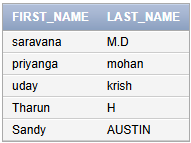
**FROM**

**employee**

**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**

**employee**

**WHERE**

**salary >= 4800;**

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

****

**SELECT**

**employee\_id,**

**first\_name,**

**last\_name,**

**salary**

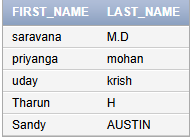
**FROM**

**employee**

**WHERE**

**last\_name = 'AUSTIN';**

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

****

**SELECT**

**first\_name,**

**last\_name**

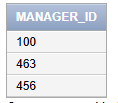
**FROM**

**employee**

**WHERE**

**department\_id IN (60, 70, 80);**

**(f ) Display the unique Manager\_Id.**

****

**SELECT DISTINCT**

**manager\_id**

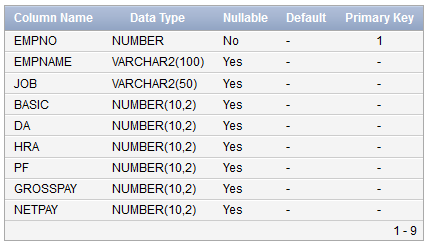
**FROM**

**employees;**

**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.**

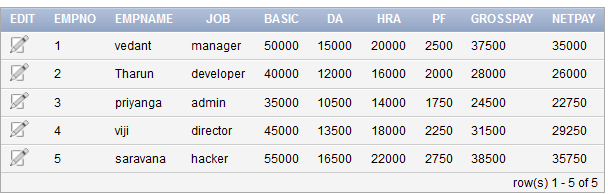
INSERT INTO Emp (EmpNo, EmpName, Job, Basic, PF) VALUES (1, ' vedant', 'Manager', 50000, 2500);

INSERT INTO Emp (EmpNo, EmpName, Job, Basic, PF) VALUES (2, ' Tharun', 'Developer', 40000, 2000);

INSERT INTO Emp (EmpNo, EmpName, Job, Basic, PF) VALUES (3, 'priyanga', 'admin', 35000, 1750);

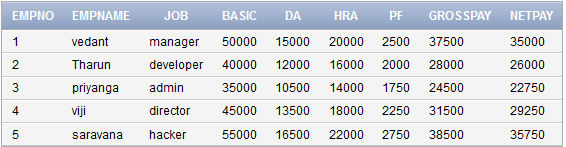
INSERT INTO Emp (EmpNo, EmpName, Job, Basic, PF) VALUES (4, 'viji', 'director', 45000, 2250);

INSERT INTO Emp (EmpNo, EmpName, Job, Basic, PF) VALUES (5, saravana', 'hacker', 55000, 2750);

****

1. **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);

****

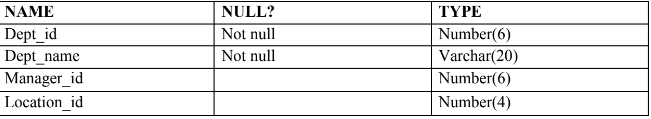
**(c) If Net Pay is less than**

SELECT EmpNo, EmpName,

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

****

**DEPARTMENT TABLE**



CREATE TABLE Department (

Dept\_id NUMBER(6) NOT NULL,

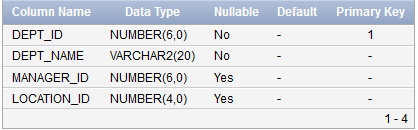
Dept\_name VARCHAR2(20) NOT NULL,

Manager\_id NUMBER(6),

Location\_id NUMBER(4),

PRIMARY KEY (Dept\_id)

);



**JOB\_GRADE TABLE**

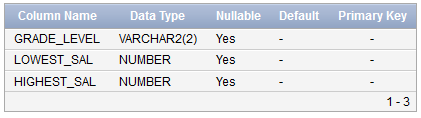
CREATE TABLE JOB\_GRADE (

Grade\_level VARCHAR2(2),

Lowest\_sal NUMBER,

Highest\_sal NUMBER

);



**LOCATION TABLE**

CREATE TABLE LOCATION (

Location\_id NUMBER(4) NOT NULL,

St\_addr VARCHAR2(40),

Postal\_code VARCHAR2(12),

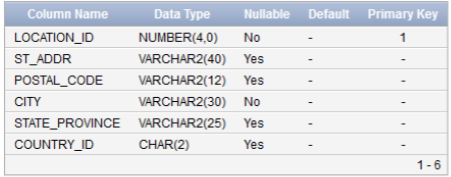
City VARCHAR2(30) NOT NULL,

State\_province VARCHAR2(25),

Country\_id CHAR(2),

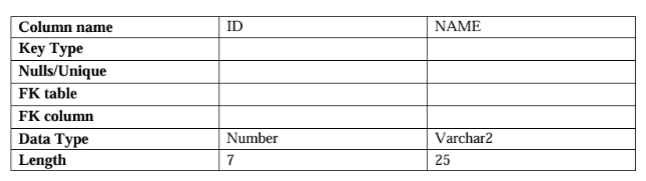
PRIMARY KEY (Location\_id)

);



1. Create the DEPT table based on the DEPARTMENT following the table instance chart

below. Confirm that the table is created.



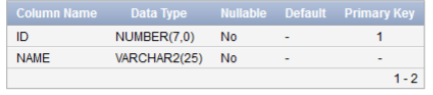
CREATE TABLE DEPT1 (

ID NUMBER(7) NOT NULL,

NAME VARCHAR2(25) NOT NULL,

PRIMARY KEY (ID)

);



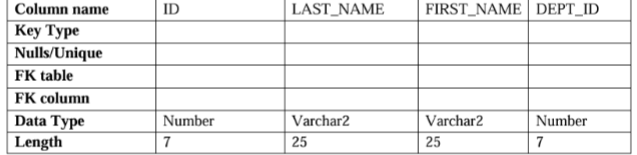
SELECT table\_name

FROM user\_tables

WHERE table\_name = ‘DEPT1’;

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

created.



CREATE TABLE EMP2 (

ID NUMBER(7) NOT NULL,

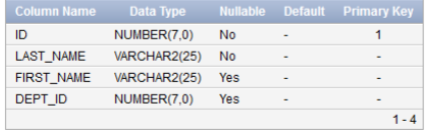
LAST\_NAME VARCHAR2(25) NOT NULL,

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

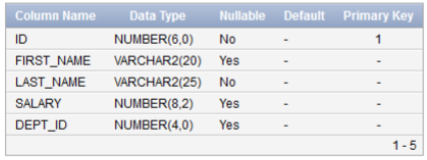
First\_name VARCHAR2(20), -- Corresponds to First\_Name

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 &#39;Department details&#39;;

COMMENT ON TABLE EMP2 IS &#39;Employee details&#39;;

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’;

