NAME: Amirthavarshini R U REG NO: 230701027

EXP NO:2

DATE: 05.08.2024

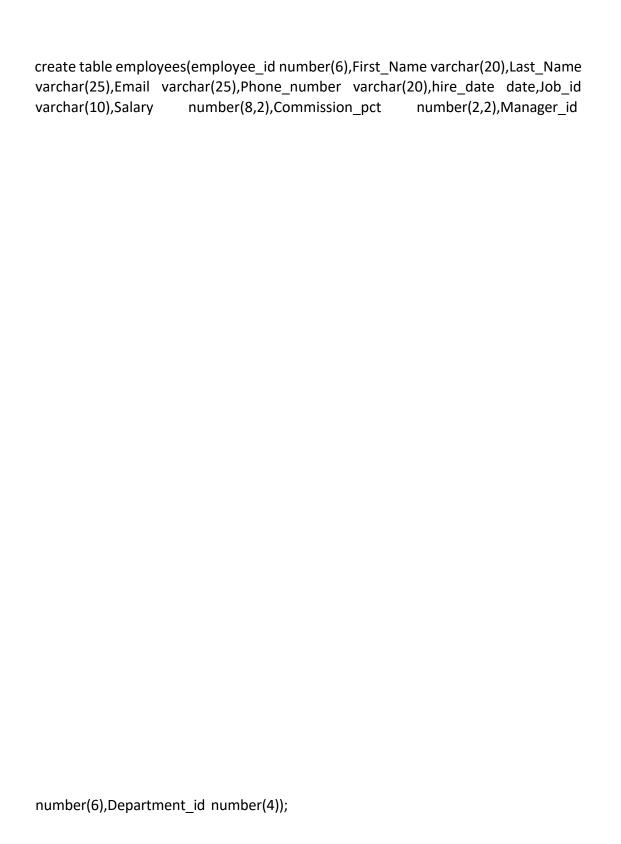
DATA MANIPULATION

Create the following tables with the given structure.

EMPLOYEES TABLE

| NAME | NULL? | TYPE |
|----------------|----------|-------------|
| Employee_id | Not null | Number(6) |
| First_Name | | Varchar(20) |
| Last_Name | Not null | Varchar(25) |
| Email | Not null | Varchar(25) |
| Phone_Number | | Varchar(20) |
| Hire_date | Not null | Date |
| Job_id | Not null | Varchar(10) |
| Salary | W | Number(8,2) |
| Commission_pct | 54 | Number(2,2) |
| Manager_id | % | Number(6) |
| Department_id | 20 | Number(4) |

number(6),Department_id number(4));



| Column Name | Data Type | Nullable | Default | Primary Key |
|----------------|--------------|----------|--------------|-------------|
| EMPLOYEE_ID | NUMBER(6,0) | Yes | = | - |
| FIRST_NAME | VARCHAR2(20) | Yes | - | |
| LAST_NAME | VARCHAR2(25) | Yes | - | |
| EMAIL | VARCHAR2(25) | Yes | | - |
| PHONE_NUMBER | VARCHAR2(20) | Yes | <u>-</u> | _ |
| HIRE_DATE | DATE | Yes | - | - |
| JOB_ID | VARCHAR2(10) | Yes | . | - |
| SALARY | NUMBER(8,2) | Yes | 4 | <u> </u> |
| COMMISSION_PCT | NUMBER(2,2) | Yes | | - |
| MANAGER_ID | NUMBER(6,0) | Yes | - | - |
| DEPARTMENT_ID | NUMBER(4,0) | Yes | = | :=: |
| | | | | 1 - 11 |

Insert into employees

values(3,'Ralph','Patel','rpatel@gmail.com',9768403822,'11-12-2000',13,5000,.25,101,40);

Insert into employees

values(4,'George','Austin','geaustin@gmail.com',9573268191,'09-10-2018',14,6000,.3,103,60);

Insert into employees values

(1, 'Ben', 'Chad', 'bchad@gmail.com', 9493836325, '24-07-2022', 11, 4500, .15, 100, 70);

Insert into employees values

(2, 'Bety', 'Dancs', 'bdancs@gmail.com', 9763467298, '19-05-2021', 12, 4800, .17, 100, 56);

Insert into employees values

(5,'Audrey','Austin','audaustin@gmail.com',9684357377,'06-05-2017',15,7000,.35,104,80);

| EMPLOYEE ID | FIRST NAME | LAST NAME | EMAIL | PHONE NUMBER | HIRE DATE | JOB ID | SALARY | COMMISSION PCT | MANAGER ID | DEPARTMENT ID |
|-------------|------------|-----------|---------------------|--------------|------------|--------|--------|----------------|------------|---------------|
| 3 | Ralph | Patel | rpatel@gmail.com | 768403822 | 11/12/2000 | 13 | 5000 | .25 | 101 | 40 |
| 4 | George | Austin | geaustin@gmail.com | 9573268191 | 09/10/2018 | 14 | 6000 | .3 | 103 | 60 |
| 1 | Ben | Chad | bchad@gmail.com | 9493836325 | 04/07/2022 | 11 | 4500 | .15 | 100 | 70 |
| 2 | Bety | Dancs | bdancs@gmail.com | 9763467298 | 09/05/2021 | 12 | 4800 | .17 | 100 | 56 |
| 5 | Audrey | Austin | audaustin@gmail.com | 9684357377 | 06/05/2017 | 15 | 7000 | .35 | 104 | 80 |

(a) Find out the employee id, names, salaries of all the employees select employee_id,first_name,last_name,salary from employees;

| EMPLOYEE_ID | FIRST_NAME | LAST_NAME | SALARY |
|-------------|------------|-----------|--------|
| 3 | Ralph | Patel | 5000 |
| 4 | George | Austin | 6000 |
| 1 | Ben | Chad | 4500 |
| 2 | Bety | Dancs | 4800 |
| 5 | Audrey | Austin | 7000 |

(a) List out the employees who works under manager 100 select *from employees where manager_id=100;

| EMPLOYEE_ID | FIRST_NAME | LAST_NAME | EMAIL | PHONE_NUMBER | HIRE_DATE | JOB_ID | SALARY | COMMISSION_PCT | MANAGER_ID | DEPARTMENT_ID |
|-------------|------------|-----------|------------------|--------------|------------|--------|--------|----------------|------------|---------------|
| 1 | Ben | Chad | bchad@gmail.com | 9493836325 | 04/07/2022 | 11 | 4500 | .15 | 100 | 70 |
| 2 | Bety | Dancs | bdancs@gmail.com | 9763467298 | 09/05/2021 | 12 | 4800 | .17 | 100 | 56 |

(b) 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;

| FIRST_NAME | LAST_NAME |
|------------|-----------|
| Ralph | Patel |
| George | Austin |
| Bety | Dancs |
| Audrey | Austin |

(a) List out the employees whose last name is _AUSTIN' select *from employees where last_name

='Austin';

| EMPLOYEE_ID | FIRST_NAME | LAST_NAME | EMAIL | PHONE_NUMBER | HIRE_DATE | JOB_ID | SALARY | COMMISSION_PCT | MANAGER_ID | DEPARTMENT_ID |
|-------------|------------|-----------|---------------------|--------------|------------|--------|--------|----------------|------------|---------------|
| 4 | George | Austin | geaustin@gmail.com | 9573268191 | 09/10/2018 | 14 | 6000 | .3 | 103 | 60 |
| 5 | Audrey | Austin | audaustin@gmail.com | 9684357377 | 06/05/2017 | 15 | 7000 | .35 | 104 | 80 |

(b) Find the names of the employees who works in departments 60,70 and 80. select first_name ,last_name from employees where department_id=60 or department_id=70 or department_id=80;

| FIRST_NAME | LAST_NAME |
|------------|-----------|
| George | Austin |
| Ben | Chad |
| Audrey | Austin |

(c) Display the unique Manager_Id.

select distinct manager_id from employees;

| MANAGER | _ID |
|---------|-----|
| 100 | |
| 101 | |
| 104 | |
| 103 | |

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 number(4),empname varchar(25),job varchar(25),basic number(10),da

number(10),hra number(10),pf number(10),grosspay number(10),netpay number(10));

| Table | Column | Data Type | Length | Precision | | Primary Key | Nullable | Default | Comment |
|-------|----------|-----------|--------|-----------|---|-------------|----------|---------|---------|
| EMP1 | EMPNO | NUMBER | | 4 | 0 | - | / | * | . •/ |
| | EMPNAME | VARCHAR2 | 25 | 12 | ্ | - 2 | ~ | 25 | - |
| | JOB | VARCHAR2 | 25 | | | | / | | * |
| | BASIC | NUMBER | | 10 | 0 | | / | | |
| | DA | NUMBER | | 10 | 0 | * | / | *: | -4 |
| | HRA | NUMBER | - | 10 | 0 | | ~ | | S.) |
| | PF | NUMBER | - | 10 | 0 | - | / | 8 | * |
| | GROSSPAY | NUMBER | - | 10 | 0 | | / | | 154 |
| | NETPAY | NUMBER | | 10 | 0 | 34 | / | | + |
| | | | | | | | | 1 | - 9 |

(a) Insert Five Records and calculate GrossPay and NetPay.

insert into emp1 values(1,'betty','manager',7000,2100,2800,1000,10,20); insert into emp1 values(2,'annnie','secretary',5000,1500,2000,1500,20,30); insert into emp1

values(3,'ralph','technician',8000,2400,3200,2000,30,40); insert into emp1 values(4,'linda','assistant',4000,1200,1600,1200,40,50); insert into emp1 values(5,'becky','manager',9000,2700,3600,2500,50,60);

| EMPNO | EMPNAME | JOB | BASIC | DA | HRA | PF | GROSSPAY | NETPAY |
|-------|---------|------------|-------|------|------|------|----------|--------|
| 1 | betty | manager | 7000 | 2100 | 2800 | 1000 | 10 | 20 |
| 2 | annnie | secretary | 5000 | 1500 | 2000 | 1500 | 20 | 30 |
| 3 | ralph | technician | 8000 | 2400 | 3200 | 2000 | 30 | 40 |
| 4 | linda | assistant | 4000 | 1200 | 1600 | 1200 | 40 | 50 |
| 5 | becky | manager | 9000 | 2700 | 3600 | 2500 | 50 | 60 |

5 rows returned in 0.00 seconds <u>Download</u>

update emp1

set

grosspay=basic+da+hra+

pf; set netpay=basic-pf;

| EMPNO | EMPNAME | JOB | BASIC | DA | HRA | PF | GROSSPAY | NETPAY |
|-------|---------|------------|-------|------|------|------|----------|--------|
| | betty | manager | 7000 | 2100 | 2800 | 1000 | 12900 | 6000 |
| | annnie | secretary | 5000 | 1500 | 2000 | 1500 | 10000 | 3500 |
| | ralph | technician | 8000 | 2400 | 3200 | 2000 | 15600 | 6000 |
| | linda | assistant | 4000 | 1200 | 1600 | 1200 | 8000 | 2800 |
| 5 | becky | manager | 9000 | 2700 | 3600 | 2500 | 17800 | 6500 |

(b) Display the employees whose Basic is lowest in each department. select * from basic=(select emp1 where min(basic) from emp1);

| MPNO | EMPNAME | JOB | BASIC | DA | HRA | PF | GROSSPAY | NETPAY |
|------|---------|-----------|-------|------|------|------|----------|--------|
| | linda | assistant | 4000 | 1200 | 1600 | 1200 | 8000 | 2800 |

(c) If Net Pay is less than select *

from

emp1

where netpay=(select min(netpay)from emp1);

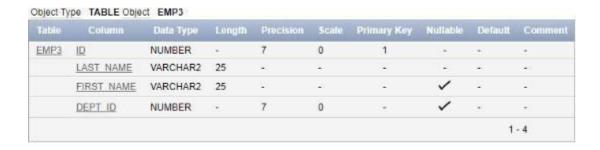
| EMPNO | EMPNAME | JOB | BASIC | DA | HRA | PF | GROSSPAY | NETPAY |
|-------|---------|-----------|-------|------|------|------|----------|--------|
| 4 | linda | assistant | 4000 | 1200 | 1600 | 1200 | 8000 | 2800 |

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

| Column name | ID | LAST_NAME | FIRST_NAME | DEPT_ID |
|--------------|--------|-----------|------------|---------|
| Key Type | | | | |
| Nulls/Unique | | | | |
| FK table | | | | |
| FK column | | | | |
| Data Type | Number | Varchar2 | Varchar2 | Number |
| Length | 7 | 25 | 25 | 7 |

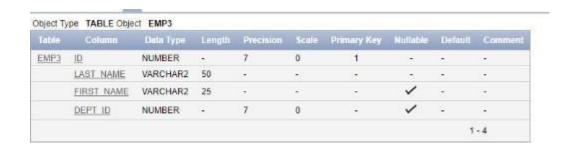
create table emp3(id number(7) primary key not null,last_name varchar2(25) not null,first_name

varchar2(25),dept_id number(7));



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

alter table emp3 modify
last_name varchar2(50);



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(employee_id number(4),first_name varchar(25),last_name
varchar(20),salary number(10),dept id varchar(5));



5 Drop the EMP table. drop table emp3;

| Table dropped. | | |
|----------------|--|--|
| 0.38 seconds | | |

6 Rename the EMPLOYEES2 table as EMP. alter table employees2 rename to emp3;

| Object Ty | pe TABLE Object | EMP3 | | | | | | | |
|-----------|-----------------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| Table | Column | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
| EMP3 | EMPLOYEE ID | NUMBER | 28 | 4 | 0 | 1. | / | - | 12 |
| | FIRST NAME | VARCHAR2 | 25 | | 7. | - | / | | * |
| | LAST NAME | VARCHAR2 | 20 | | 7: | - 5 | / | | |
| | SALARY | NUMBER | 28 | 10 | 0 | 5- | / | 147 | 92.5 |
| | DEPT ID | VARCHAR2 | 5 | | - | 31 | / | | |
| | | | | | | | | 1 | - 5 |

8 Drop the First_name column from the EMP table and confirm it.

alter table emp3 drop column first_name;

| Object Ty | pe TABLE Object | EMP3 | | | | | | | |
|-----------|-----------------|-----------|--------|-----------|-----|-------------|----------|---------|---------|
| Table | Column | Data Type | Length | Precision | | Primary Key | Nullable | Default | Comment |
| | EMPLOYEE ID | NUMBER | | 4 | 0 | - | / | - | 4 |
| | LAST NAME | VARCHAR2 | 20 | | 7.5 | | / | * | |
| | SALARY | NUMBER | - | 10 | 0 | | / | | 4 |
| | DEPT ID | VARCHAR2 | 5 | - | 2 | 12 | / | - | 2 |
| | | | | | | | | 1 | - 4 |