**02.DATA MANIPULATIONS**

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

create table employee (employee 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));

**Output:**

Table created.

**a) Find out the employee id, name, salaries of all the employees**

Select employee\_id, first\_name, last\_name, salary from employee;

**Output:**

|  |  |  |  |
| --- | --- | --- | --- |
| **EMPLOYEE\_ID** | **FIRST\_NAME** | **LAST\_NAME** | **SALARY** |
| 101 | shamrudha | varshini | 100000 |
| 102 | prathika | priya | 99000 |
| 103 | lokeshwari | d | 99000 |
| 104 | jack | austin | 4000 |
| 105 | rithu | priya | 100000 |

**b) List out the employee who works under manger 100.**

Select \*from employee where manager\_id='100'.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPLOYEE\_ID** | **FIRST\_NAME** | **LAST\_NAME** | **EMAIL** | **PHONE\_NUMBER** | **HIRE\_DATE** | **JOB\_ID** | **SALARY** | **COMMISSION\_PCT** | **MANAGER\_ID** | **DEPARTMENT\_ID** |
| 101 | shamrudha | varshini | psv@gmail.com | xxxxx | 10/14/2005 | abcd | 100000 | .5 | 100 | 60 |
| 102 | prathika | priya | prathika@gmail.com | yyyyy | 09/05/2005 | abcde | 99000 | .55 | 100 | 70 |

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

Select \*from employee where salary>='4800';

**Output:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPLOYEE\_ID** | **FIRST\_NAME** | **LAST\_NAME** | **EMAIL** | **PHONE\_NUMBER** | **HIRE\_DATE** | **JOB\_ID** | **SALARY** | **COMMISSION\_PCT** | **MANAGER\_ID** | **DEPARTMENT\_ID** |
| 101 | shamrudha | varshini | psv@gmail.com | xxxxx | 10/14/2005 | abcd | 100000 | .5 | 100 | 60 |
| 102 | prathika | priya | prathika@gmail.com | yyyyy | 09/05/2005 | abcde | 99000 | .55 | 100 | 70 |
| 103 | lokeshwari | d | ld@gmail.com | zzzzz | 11/15/2005 | pqrs | 99000 | .51 | 101 | 80 |
| 105 | rithu | priya | rp@gmail.com | aaaaa | 11/28/2005 | abdc | 100000 | .5 | 50 | 50 |

**d) List out the employee whose last name is ‘austin’**

Select \*from employee where last\_name='austin';

**Output:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPLOYEE\_ID** | **FIRST\_NAME** | **LAST\_NAME** | **EMAIL** | **PHONE\_NUMBER** | **HIRE\_DATE** | **JOB\_ID** | **SALARY** | **COMMISSION\_PCT** | **MANAGER\_ID** | **DEPARTMENT\_ID** |
| 104 | jack | austin | ja@gmail.com | qqqqq | 10/05/2005 | pqrs | 4000 | .21 | 50 | 50 |

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

Select \*from employee where department\_id='60' or department\_id='70' or department\_id='80';

**Output:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPLOYEE\_ID** | **FIRST\_NAME** | **LAST\_NAME** | **EMAIL** | **PHONE\_NUMBER** | **HIRE\_DATE** | **JOB\_ID** | **SALARY** | **COMMISSION\_PCT** | **MANAGER\_ID** | **DEPARTMENT\_ID** |
| 101 | shamrudha | varshini | psv@gmail.com | xxxxx | 10/14/2005 | abcd | 100000 | .5 | 100 | 60 |
| 102 | prathika | priya | prathika@gmail.com | yyyyy | 09/05/2005 | abcde | 99000 | .55 | 100 | 70 |
| 103 | lokeshwari | d | ld@gmail.com | zzzzz | 11/15/2005 | pqrs | 99000 | .51 | 101 | 80 |

**f) Display the unique manager\_id**

Select distinct manager\_id from employee;

**Output:**

|  |
| --- |
| **MANAGER\_ID** |
| 100 |
| 101 |
| 50 |

**Create an Emp table with following fields: (Emp No, Emp Name, Job, Basic, DA, HRA, PF, Gross Pay, Net pay)(Calculate DA as 30% of Basic and HRA as 40% of Basic).**

create table empy (empno number (4), empname varchar (25), job varchar (50), basic number (10,2), DA

number (10,2) as (basic\*0.30), HRA number (10,2) as (basic\*0.40), PF number (10,2), grosspay

number (10,2), Netpay number (10,2));

**a) Insert five records and calculate Grosspay and Netpay.**

**Output:**

insert into empy (empno, empname, job, basic, PF) values (101,'jessy', 'manager',100000,1000);

insert into empy (empno, empname, job, basic, PF) values (102,'john', 'assistant team leader',85000,1000);

insert into empy (empno, empname, job, basic, PF) values (103,'lisa', 'developer',82000,1000);

insert into empy (empno, empname, job, basic, PF) values (104,'jisoo',’team leader’, 90000,1000);

insert into empy (empno, empname, job, basic, PF) values (105,'kim Tae', 'assistant manager',95000,1000);

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **EMPNAME** | **JOB** | **BASIC** | **DA** | **HRA** | **PF** | **GROSSPAY** | **NETPAY** |
| 101 | jessy | manager | 100000 | 30000 | 40000 | 1000 | - | - |
| 102 | john | assistant team leader | 85000 | 25500 | 34000 | 1000 | - | - |
| 103 | Lisa | developer | 82000 | 24600 | 32800 | 1000 | - | - |
| 104 | jisoo | team leader | 90000 | 27000 | 36000 | 1000 | - | - |
| 105 | kim Tae | assistant manager | 95000 | 28500 | 38000 | 1000 | - | - |

update empy set grosspay=basic+DA+HRA

5 row(s) updated.

update empy set Netpay=basic-PF;

5 row(s) updated.

**b) Display the employee whose Basic is lower in each department.**

select \* from empy where basic = (select min (basic) from empy);

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **EMPNAME** | **JOB** | **BASIC** | **DA** | **HRA** | **PF** | **GROSSPAY** | **NETPAY** |
| 101 | jessy | manager | 100000 | 30000 | 40000 | 1000 | 170000 | 99000 |
| 102 | john | assistant team leader | 85000 | 25500 | 34000 | 1000 | 144500 | 84000 |
| 103 | Lisa | developer | 82000 | 24600 | 32800 | 1000 | 139400 | 81000 |
| 104 | jisoo | team leader | 90000 | 27000 | 36000 | 1000 | 153000 | 89000 |
| 105 | kim Tae | assistant manager | 95000 | 28500 | 38000 | 1000 | 161500 | 94000 |

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

select \* from empy where Netpay = (select min (netpay) from empy);

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **EMPNAME** | **JOB** | **BASIC** | **DA** | **HRA** | **PF** | **GROSSPAY** | **NETPAY** |
| 103 | Lisa | developer | 82000 | 24600 | 32800 | 1000 | 139400 | 81000 |

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

create table dept (id number (7) primary key not null, Name varchar (25));

**Output:**

Dept

|  |  |
| --- | --- |
| id | Name |
|  | |

**2)Created the EMP table based on the following instance chart. Confirm that the table is created.**

create table emply (id number (7) primary key, last\_name varchar (25) not null, first\_name varchar (25), dept\_id number (7));

**Output:**

Table created.

| **Column Name** | **Data Type** | **Nullable** | **Default** | **Primary Key** |
| --- | --- | --- | --- | --- |
| ID | NUMBER (7,0) | No | - | 1 |
| LAST\_NAME | VARCHAR2(25) | No | - | - |
| FIRST\_NAME | VARCHAR2(25) | Yes | - | - |
| DEPT\_ID | NUMBER (7,0) | Yes | - | - |

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

**Output:**

alter table emply modify last\_name  varchar(50);

Table altered.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Nullable** | **Default** | **Primary Key** |
| ID | NUMBER(7,0) | No | - | 1 |
| LAST\_NAME | VARCHAR2(50) | No | - | - |
| FIRST\_NAME | VARCHAR2(25) | Yes | - | - |
| DEPT\_ID | NUMBER(7,0) | Yes | - | - |

**4)create the employees2 table based in the structure of the EMPLOYEES table. Include Only the Employee\_id , First\_name, Last\_name, Salary and Dept\_id columns. Name the columns id, First\_name, Last\_name, Salary and Dept\_id respectively.**

**Output:**

create table employee2(id number(7),first\_name varchar(25),last\_name varchar(25),salary number(10),dept\_id number(5));

Table created.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Nullable** | **Default** | **Primary Key** |
| ID | NUMBER (7,0) | Yes | - | - |
| FIRST\_NAME | VARCHAR2(25) | Yes | - | - |
| LAST\_NAME | VARCHAR2(25) | Yes | - | - |
| SALARY | NUMBER (10,0) | Yes | - | - |
| DEPT\_ID | NUMBER (5,0) | Yes | - | - |

**5)Drop the EMP table.**

drop table emply;

**Output:**

Table dropped.

**6)Rename the EMPLOYEES2 table as EMP.**

alter table employee2 rename to emply;

**output:**

Table altered.

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

comment on table dept is 'this is to store dept info'.

**Output:**

Statement processed.

comment on table emply is 'this is to store emply info'.

**Output:**

Statement processed.

**8)Drop the first\_name column from the EMP table and confirm it.**

alter table emply drop column first\_name

**Output:**

Table altered.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Nullable** | **Default** | **Primary Key** |
| ID | NUMBER (7,0) | Yes | - | - |
| LAST\_NAME | VARCHAR2(25) | Yes | - | - |
| SALARY | NUMBER (10,0) | Yes | - | - |
| DEPT\_ID | NUMBER (5,0) | Yes | - | - |