1-Create a table for Customer.
Column Name Format
cust_id char(5)
Lname char(15)
Fname char(15)
Area char(2)
phone_no number(8)

SOLUTION:

```
create table Customer (
 cust_id       char(5),
Lname char(15),
Fname char(15),
Area char(2),
phone_no number(8));
```

```
Describe Customer;
```

2-Create a table for Movie
Column Name Format
mv_no number (5)
Title char(25)
Type char(10)
Star char(25)

Price number(8,2)

SOLUTION:

```
create table Movie (
mv_no number (5),
Title char(25),
Type char(10),
Star char(25),
Price number(8,2));
```

```
Describe movie;
```

3- **Create a table for invoice**
Column Name Format

inv_no char(3)
mv_no number(5)
cust_id char(5)
issue_date date
return_date date

SOLUTION:

```
create table invoice
 (
inv_no char(3),
```

mv_no number(5),
cust_id char(5),
issue_date date,
return_date date

);

Describe invoice;

---

4. **Insert the below Record in the Customer table.**

Cust_id	lname	fname	area	Phone_no
a01	Patel	Vijay	sa	381334
a02	Saitwal	Vandana	mu	556037
a03	Jaguste	Pramada	da	372631
a04	Navindgi	Basu	ba	666612
a05	Sreedhran	Ravi	va	-
a06	-	Rukmini	ga	512527

SOLUTION:

1->

Insert into Customer(cust_id, Lname ,Fname,Area ,phone_no) values ('a01','Patel','Vijay','sa',381334);

Output:

Customer

cust_id	Lname	Fname	Area	phone_no
a01	Patel	Vijay	sa	381334

2-> Insert into Customer(cust_id, Lname ,Fname,Area ,phone_no) values ('a02', 'Saitwal', 'Vandana', 'mu', 556037);

Customer

cust_id	Lname	Fname	Area	phone_no
a01	Patel	Vijay	sa	381334
a02	Saitwal	Vandana	mu	556037

3-> Insert into Customer(cust_id, Lname ,Fname,Area ,phone_no) values ('a03', 'Jaguste', 'Pramada', 'da', 372631);

4-> Insert into Customer(cust_id, Lname ,Fname,Area ,phone_no) values ('a04', 'Navindgi', 'Basu', 'ba', 666612);

5-> Insert into Customer(cust_id, Lname ,Fname,Area) values ('a05', 'Sreedhran', 'Ravi', 'va');

CUST_ID	LNAME	FNAME	AREA	PHONE_NO
a01	Patel	Vijay	sa	381334
a02	Saitwal	Vandana	mu	556037
a03	Jaguste	Pramada	da	372631
a04	Navindgi	Basu	ba	666612
a05	Sreedhran	Ravi	va	-

6-> Insert into Customer(cust_id, Lname ,Fname,Area ,phone_no) values ('a06', ' ', 'Rukmini', 'ga',512527);

CUST_ID	LNAME	FNAME	AREA	PHONE_NO
a01	Patel	Vijay	sa	381334
a02	Saitwal	Vandana	mu	556037
a03	Jaguste	Pramada	da	372631
a04	Navindgi	Basu	ba	666612
a05	Sreedhran	Ravi	va	-
a06		Rukmini	ga	512527

5. **Insert the below record in the Movie table**

mv_no	title	type	Star	Price
1	Bloody Vengeance	action	Jackie Chan	180.95
2	The firm	thriller	Tom Cruise	200.00
3	Pretty woman	romantic	Richarge Gere	150.00
4	Home alone	comedy	Macaulay Culkin	150.55
5	The fugitive	thriller	Harrison Ford	200.00
6	Coma	suspence	Michael Douglas	100.00
7	Dracula	horror	Gray Oldman	150.00
8	Quick change	comedy	Bill Murray	100.00
9	Gone with the wind	drama	Clarke Gable	200.00
10	Carry on doctor	comedy	Leslie Phillips	100.00

SOLUTION:

1-> Insert into Movie (mv_no,Title,Type,Star,Price) values (1,'Bloody Vengeance',' action','Jackie Chan', 180.95);

Movie

mv_no	Title	Type	Star	Price
1	Bloody Vengeance	action	Jackie Chan	180.95

2-> Insert into Movie (mv_no,Title,Type,Star,Price) values (2,'The firm',' thriller','Tom Cruise', 200.00);

```
3-> Insert into Movie (mv_no,Title,Type,Star,Price)
values (3,'Pretty woman',' romantic','Richarge Gere',
150.00);
4-> Insert into Movie (mv_no,Title,Type,Star,Price)
values (4,'Home alone',' comedy','Macaulay Culkin',
150.55);
5-> Insert into Movie (mv_no,Title,Type,Star,Price)
values (5,'The fugitive',' thriller','Harrison Ford', 200.00);
6-> Insert into Movie (mv_no,Title,Type,Star,Price)
values (6,'Coma',' suspence','Michael Douglas', 100.00);
7-> Insert into Movie (mv_no,Title,Type,Star,Price)
values (7,'Dracula',' horror','Gray Oldman', 150.00);
8-> Insert into Movie (mv_no,Title,Type,Star,Price)
values (8,'Quick change',' comedy','Bill Murray', 100.00);
9-> Insert into Movie (mv_no,Title,Type,Star,Price)
values (9,'Gone with the wind',' drama','Clarke Gable',
200.00);
10-> Insert into Movie (mv_no,Title,Type,Star,Price)
values (10,'Carry on doctor',' comedy','Leslie Phillips',
100.00);
->select * from Movie;
```

MV_NO	TITLE	TYPE	STAR	PRICE
1	Bloody Vengeance	action	Jackie Chan	180.95
2	The firm	thriller	Tom Cruise	200
3	Pretty woman	romantic	Richarge Gere	150
4	Home alone	comedy	Macaulay Culkin	150.55
5	The fugitive	thriller	Harrison Ford	200
6	Coma	suspence	Michael Douglas	100
7	Dracula	horror	Gray Oldman	150
8	Quick change	comedy	Bill Murray	100
9	Gone with the wind	drama	Clarke Gable	200
10	Carry on doctor	comedy	Leslie Phillips	100

---

6. **Insert the below record in the invoice table**

inv_no	mv_no	cust_id	issue_date	return_date
i01	4	a01	13-jan-96	25-jan-96
i02	3	a02	12-feb-96	15-feb-96
i03	1	a02	15-feb-96	18-feb-96
i04	6	a03	10-mar-96	13- mar -96
i05	7	a04	05-feb-96	08-feb-96
i06	2	a06	18-mar-96	21-mar-96
i07	9	a05	07-jan-96	10-jan-96
i08	9	a01	11-feb-96	14-feb-96
i09	1	a05	15-feb-96	28-feb-96

create table **invoice**

(
inv_no char(3),
mv_no number(5),
cust_id char(5),
issue_date date,
return_date date

);

describe invoice;

SOLUTION:

1-> Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i01',4,'a01', TO_DATE('13-jan-1996', 'DD/MM/YYYY'),TO_DATE('25-jan-1996', 'DD/MM/YYYY'));

INV_NO	MV_NO	CUST_ID	ISSUE_DATE	RETURN_DATE
i01	4	a01	01/13/1996	01/25/1996

2-> Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i02',3,'a02', TO_DATE('12-feb-1996', 'DD/MM/YYYY'),TO_DATE('15-feb-1996', 'DD/MM/YYYY'));

3-> Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i03',1,'a02', TO_DATE('15-feb-1996', 'DD/MM/YYYY'),TO_DATE('18-feb-1996', 'DD/MM/YYYY'));
4-> Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i04',6,'a03', TO_DATE('10-mar-1996', 'DD/MM/YYYY'),TO_DATE('13-mar-1996', 'DD/MM/YYYY'));
5-> Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i05',7,'a04',TO_DATE('5-feb-1996', 'DD/MM/YYYY') ,TO_DATE('8-feb-1996', 'DD/MM/YYYY'));
6-> Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i06',2,'a06',TO_DATE('18-mar-1996', 'DD/MM/YYYY') ,TO_DATE('21-mar-1996', 'DD/MM/YYYY'));
7-> Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i07',9,'a05', TO_DATE('07-jan-1996', 'DD/MM/YYYY'),TO_DATE('10-jan-1996', 'DD/MM/YYYY'));
8-> Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i08',9,'a01',

TO_DATE('11-feb-1996', 'DD/MM/YYYY'), TO_DATE('14-feb-1996', 'DD/MM/YYYY'));
9->Insert into invoice (inv_no, mv_no, cust_id, issue_date, return_date) values ('i09',1,'a05',TO_DATE('15-feb-1996', 'DD/MM/YYYY') ,TO_DATE('28-feb-1996', 'DD/MM/YYYY'));

INV_NO	MV_NO	CUST_ID	ISSUE_DATE	RETURN_DATE
i01	4	a01	01/13/1996	01/25/1996
i02	3	a02	02/12/1996	02/15/1996
i05	7	a04	02/05/1996	02/08/1996
i06	2	a06	03/18/1996	03/21/1996
i03	1	a02	02/15/1996	02/18/1996
i04	6	a03	03/10/1996	03/13/1996
i07	9	a05	01/07/1996	01/10/1996
i08	9	a01	02/11/1996	02/14/1996
i09	1	a05	02/15/1996	02/28/1996

---

7. **Do the Following:**

Create the table Client_Master

Column Name	Data Type	Size
CLIENTNO	Varchar2	6
NAME	Varchar2	20
ADDRESS	Varchar2	50
CITY	Varchar2	20
PINCODE	Int	8
STATE	Varchar2	20
BAL_DUE	Decimal	10,2

SOLUTION:

CREATE table Client_Master(CLIENTNO varchar2(6),NAME varchar2(20),ADDRESS varchar2(50),CITY varchar2(20),PINCODE number(8),STATE varchar2(20),BAL_DUE number(10,2));

Insert the following data into table

CLIENTNO	NAME	ADDRESS	CITY	PINCODE	STATE	BAL_DUE
C0001	Rohan Joshi	Khapaitya Chakla	Surat	395003	Gujarat	15000
C0002	Mamta Mazumdar	Salt Lake	Kolkata	460012	West Bengal	5000
C0003	Chhaya Bankar	Worli	Mumbai	400054	Maharashtra	2000
C0004	Ashwini Rathod	Ghangaur Ghat	Udaipur	780011	Rajasthan	7000
C0005	Ivan Bayross	Indiranagar	Bangalore	560050	Karnataka	1500
C0006	Deepak Sharma	Bandra	Mumbai	400002	Maharashtra	4300
C0007	Shymali Bhide	Juhu	Mumbai	470912	Maharashtra	2100

SOLUTION:

1-> insert into Client_Master(CLIENTNO,NAME,ADDRESS,CITY, PINCODE,STATE,BAL_DUE) values ('C0001','Rohan Joshi','Khapaitya Chakla','Surat',395003,'Gujarat',15000);

Client_Master

CLIENTNO	NAME	ADDRESS	CITY	PINCODE	STATE	BAL_DUE
C0001	Rohan Joshi	Khapaitya Chakla	Surat	395003	Gujarat	15000

2-> insert into Client_Master(CLIENTNO,NAME,ADDRESS,CITY,

PINCODE,STATE,BAL_DUE) values ('C0002','Mamta Mazumdar','Salt Lake','Kolkata',460012,'West Bengal',5000);

3-> insert into Client_Master(CLIENTNO,NAME,ADDRESS,CITY, PINCODE,STATE,BAL_DUE) values ('C0003','Chhaya Bankar','Worli','Mumbai',400054,'Maharashtra',2000);

4-> insert into Client_Master(CLIENTNO,NAME,ADDRESS,CITY, PINCODE,STATE,BAL_DUE) values ('C0004','Ashwini Rathod','Ghangaur Ghat','Udaipur',780011,'Rajasthan',7000);

5-> insert into Client_Master(CLIENTNO,NAME,ADDRESS,CITY, PINCODE,STATE,BAL_DUE) values ('C0005','Ivan Bayross','Indiranagar','Bangalore',560050,'Karnataka ',1500);

6-> insert into Client_Master(CLIENTNO,NAME,ADDRESS,CITY, PINCODE,STATE,BAL_DUE) values ('C0006','Deepak Sharma','Bandra','Mumbai',400002,'Maharashtra',43 00);

7-> insert into Client_Master(CLIENTNO,NAME,ADDRESS,CITY, PINCODE,STATE,BAL_DUE) values

('C0007','Shymali Bhide','Juhu','Mumbai',470912,'Maharashtra',2100);

Client_Master

CLIENTNO	NAME	ADDRESS	CITY	PINCODE	STATE	BAL_DUE
C0001	Rohan Joshi	Khapaitya Chakla	Surat	395003	Gujarat	15000
C0002	Mamta Mazumdar	Salt Lake	Kolkata	460012	West Bengal	5000
C0003	Chhaya Bankar	Worli	Mumbai	400054	Maharashtra	2000
C0004	Ashwini Rathod	Ghangaur Ghat	Udaipur	780011	Rajasthan	7000
C0005	Ivan Bayross	Indiranagar	Bangalore	560050	Karnataka	1500
C0006	Deepak Sharma	Bandra	Mumbai	400002	Maharashtra	4300
C0007	Shymali Bhide	Juhu	Mumbai	470912	Maharashtra	2100

Queries:

1. List the details of the client according to the bal_due
2. List all clients who are located in Mumbai
3. Show different types of state in "Client_Master" table by eliminating the repeated states.
4. Change the city of client no "C0005" to Mangalore.
5. Change the bal_due of client no "C0001" to Rs. 1000
6. Delete from Client_master where the state holds the value "Rajasthan"
7. Add a column name "Mobile" of data type "Number" & size="10".
8. Create a table "Balance_Details" having three 3 fields (ClientNo, Name, Bal_Due) from the source table name "Client_master" and rename the field Bal_Due to Balance.
9. Change the name of "Client_Master" table to "Customer"

Queries solution:

1->SELECT * FROM CLIENT_MASTER ORDER BY BAL_DUE DESC;

2-> select * from **Client_Master** where city='Mumbai';

3-> select state from Client_Master;

-> select distinct state from Client_Master;

STATE
Maharashtra
Gujarat
Rajasthan
Karnataka
West Bengal

4-> update Client_Master set city='Mangalore' where CLIENTNO ='C0005';

CLIENTNO	NAME	ADDRESS	CITY	PINCODE	STATE	BAL_DUE
C0001	Rohan Joshi	Khapaitya Chakla	Surat	395003	Gujarat	15000
C0002	Mamta Mazumdar	Salt Lake	Kolkata	460012	West Bengal	5000
C0003	Chhaya Bankar	Worli	Mumbai	400054	Maharashtra	2000
C0004	Ashwini Rathod	Ghangaur Ghat	Udaipur	780011	Rajasthan	7000
C0005	Ivan Bayross	Indiranagar	Mangalore	560050	Karnataka	1500
C0006	Deepak Sharma	Bandra	Mumbai	400002	Maharashtra	4300
C0007	Shymali Bhide	Juhu	Mumbai	470912	Maharashtra	2100

5-> update **Client_Master** set BAL_DUE =1000 where CLIENTNO ='C0001';

CLIENTNO	NAME	ADDRESS	CITY	PINCODE	STATE	BAL_DUE
C0001	Rohan Joshi	Khapaitya Chakla	Surat	395003	Gujarat	1000
C0002	Mamta Mazumdar	Salt Lake	Kolkata	460012	West Bengal	5000
C0003	Chhaya Bankar	Worli	Mumbai	400054	Maharashtra	2000
C0004	Ashwini Rathod	Ghangaur Ghat	Udaipur	780011	Rajasthan	7000
C0005	Ivan Bayross	Indiranagar	Mangalore	560050	Karnataka	1500
C0006	Deepak Sharma	Bandra	Mumbai	400002	Maharashtra	4300
C0007	Shymali Bhide	Juhu	Mumbai	470912	Maharashtra	2100

6-> delete from client_master where STATE='Rajasthan';

CLIENTNO	NAME	ADDRESS	CITY	PINCODE	STATE	BAL_DUE
C0001	Rohan Joshi	Khapaitya Chakla	Surat	395003	Gujarat	1000
C0002	Mamta Mazumdar	Salt Lake	Kolkata	460012	West Bengal	5000
C0003	Chhaya Bankar	Worli	Mumbai	400054	Maharashtra	2000
C0005	Ivan Bayross	Indiranagar	Mangalore	560050	Karnataka	1500
C0006	Deepak Sharma	Bandra	Mumbai	400002	Maharashtra	4300
C0007	Shymali Bhide	Juhu	Mumbai	470912	Maharashtra	2100

7-> ALTER TABLE Client_Master ADD(Mobile number(10));

CLIENTNO	NAME	ADDRESS	CITY	PINCODE	STATE	BAL_DUE	MOBILE
C0001	Rohan Joshi	Khapaitya Chakla	Surat	395003	Gujarat	1000	-
C0002	Mamta Mazumdar	Salt Lake	Kolkata	460012	West Bengal	5000	-
C0003	Chhaya Bankar	Worli	Mumbai	400054	Maharashtra	2000	-
C0005	Ivan Bayross	Indiranagar	Mangalore	560050	Karnataka	1500	-
C0006	Deepak Sharma	Bandra	Mumbai	400002	Maharashtra	4300	-
C0007	Shymali Bhide	Juhu	Mumbai	470912	Maharashtra	2100	-

8-> create table Balance_Details(ClientNo, Name, Bal_Due) AS SELECT CLIENTNO,NAME,BAL_DUE from Client_Master;

->describe Balance_Details;

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BALANCE_DETAILS	CLIENTNO	VARCHAR2	6	-	-	-	✓	-	-
	NAME	VARCHAR2	20	-	-	-	✓	-	-
	BAL_DUE	NUMBER	-	10	2	-	✓	-	-
									1 - 3

9-> RENAME Client_Master TO Customer_new;

-> select * from Customer_new;

CLIENTNO	NAME	ADDRESS	CITY	PINCODE	STATE	BAL_DUE	MOBILE
C0001	Rohan Joshi	Khapaitya Chakla	Surat	395003	Gujarat	1000	-
C0002	Mamta Mazumdar	Salt Lake	Kolkata	460012	West Bengal	5000	-
C0003	Chhaya Bankar	Worli	Mumbai	400054	Maharashtra	2000	-
C0005	Ivan Bayross	Indiranagar	Mangalore	560050	Karnataka	1500	-
C0006	Deepak Sharma	Bandra	Mumbai	400002	Maharashtra	4300	-
C0007	Shymali Bhide	Juhu	Mumbai	470912	Maharashtra	2100	-

8. **DO the Following:**

Table Name : Employee

Employee_no	First_name	Last_name	Salary	Joining date	Department
1	John	Abraham	100000	01-JAN-13	Banking
2	Michael	Clarke	80000	01-APR-13	Insurance
3	Roy	Thomas	70000	21-May-13	Banking
4	Tom	Jose	60000	08-Dec-13	Insurance
5	Jerry	Pinto	65000	11-Feb-14	Marketing
6	Philip	Mathew	45000	01-Jul-14	Services
7	John	Henry	55000	01-Jan-15	Technical
8	Ivan	Bayross	60000	01-Aug-15	Sales

```
create table Employee
 (
Employee_no number(3) primary key,
First_name varchar2(20),
Last_name varchar2(20),
Salary number(8),
Joining_date date,
Department varchar2(20)
);


-> describe Employee;
```

Object Type **TABLE** Object **EMPLOYEE**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEE	EMPLOYEE_NO	NUMBER	-	3	0	1	-	-	-
	FIRST_NAME	VARCHAR2	20	-	-	-	✓	-	-
	LAST_NAME	VARCHAR2	20	-	-	-	✓	-	-
	SALARY	NUMBER	-	8	0	-	✓	-	-
	JOINING_DATE	DATE	7	-	-	-	✓	-	-
	DEPARTMENT	VARCHAR2	20	-	-	-	✓	-	-
									1 - 6

8. DO the Following:

Table Name : Employee

Employee_no	First_name	Last_name	Salary	Joining date	Department
1	John	Abraham	100000	01-JAN-13	Banking
2	Michael	Clarke	80000	01-APR-13	Insurance
3	Roy	Thomas	70000	21-May-13	Banking
4	Tom	Jose	60000	08-Dec-13	Insurance
5	Jerry	Pinto	65000	11-Feb-14	Marketing
6	Philip	Mathew	45000	01-Jul-14	Services
7	John	Henry	55000	01-Jan-15	Technical
8	Ivan	Bayross	60000	01-Aug-15	Sales

Insert records:

1->Insert into Employee (Employee_no, First_name, Last_name, Salary, Joining_date, Department) values (1,'John','Abraham',100000,TO_DATE('01-jan-2013','DD/MM/YYYY'),'Banking');

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking

2-> Insert into Employee (Employee_no, First_name, Last_name, Salary, Joining_date, Department) values (2,'Michael','Clarke',80000,TO_DATE('01-apr-2013','DD/MM/YYYY'),'Insurance');
3-> Insert into Employee (Employee_no, First_name, Last_name, Salary, Joining_date, Department) values (3,'Roy','Thomas',70000,TO_DATE('21-may-2013','DD/MM/YYYY'),'Banking');
4-> Insert into Employee (Employee_no, First_name, Last_name, Salary, Joining_date, Department) values (4,'Tom','Jose',60000,TO_DATE('08-dec-2013','DD/MM/YYYY'), 'Insurance');
5-> Insert into Employee (Employee_no, First_name, Last_name, Salary, Joining_date, Department) values (5,'Jerry','Pinto',65000,TO_DATE('11-feb-2014','DD/MM/YYYY'), 'Marketing');
6-> Insert into Employee (Employee_no, First_name, Last_name, Salary, Joining_date, Department) values (6,'Philip','Mathew',45000,TO_DATE('01-jul-2014','DD/MM/YYYY'), 'Services');
7-> Insert into Employee (Employee_no, First_name, Last_name, Salary, Joining_date, Department) values (7,'John','Henry',55000,TO_DATE('01-jan-2015','DD/MM/YYYY'), 'Technical');
8-> Insert into Employee (Employee_no, First_name, Last_name, Salary, Joining_date, Department) values (8,'Ivan','Bayross',60000,TO_DATE('01-aug-2015','DD/MM/YYYY'), 'Sales');

-> select * from employee;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance
5	Jerry	Pinto	65000	02/11/2014	Marketing
6	Philip	Mathew	45000	07/01/2014	Services
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

Table Name : Incentives

Employee_Ref_Id	Incentive_date	Incentive_amount
1	01-Feb-13	5000
2	01-Dec-13	3000
3	01-Mar-13	4000
4	21-Mar-15	4500
5	01-Sep-15	3500

2. Create EMPLOYEE_REF_ID in INCENTIVES table as foreign key with respect to EMPLOYEE_ID in employee table

create table **Incentives**
(
Employee_Ref_Id number(3) ,
Incentive_date date,
Incentive_amount number(5),
Foreign key (Employee_Ref_Id) references employee
);

-> describe Incentives;

Object Type **TABLE** Object **INCENTIVES**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
INCENTIVES	EMPLOYEE_REF_ID	NUMBER	-	3	0	-	✓	-	-
	INCENTIVE_DATE	DATE	7	-	-	-	✓	-	-
	INCENTIVE_AMOUNT	NUMBER	-	5	0	-	✓	-	-
									1 - 3

Table Name : Incentives

Employee_Ref_Id	Incentive_date	Incentive_amount
1	01-Feb-13	5000
2	01-Dec-13	3000
3	01-Mar-13	4000
4	21-Mar-15	4500
5	01-Sep-15	3500

Insert records:

-> Insert into **Incentives** (Employee_Ref_Id, **Incentive**_date, **Incentive_amount**) values (1, TO_DATE('01-feb-2013','DD/MM/YYYY'), 5000);

EMPLOYEE_REF_ID	INCENTIVE_DATE	INCENTIVE_AMOUNT
1	02/01/2013	5000

-> Insert into **Incentives** (Employee_Ref_Id, **Incentive**_date, **Incentive_amount**) values (2, TO_DATE('01-dec-2013','DD/MM/YYYY'), 3000);

-> Insert into **Incentives** (Employee_Ref_Id, **Incentive**_date, **Incentive_amount**) values (3, TO_DATE('01-mar-2013','DD/MM/YYYY'), 4000);

-> Insert into **Incentives** (Employee_Ref_Id, **Incentive**_date, **Incentive_amount**) values (4, TO_DATE('21-mar-2015','DD/MM/YYYY'), 4500);

-> Insert into **Incentives** (Employee_Ref_Id, **Incentive**_date, **Incentive_amount**) values (5, TO_DATE('01-sep-2015','DD/MM/YYYY'), 3500);

3. Get all employee details from the employee table

4. Get First_Name,Last_Name from employee table.

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5. Get First_Name from employee table using alias name “Employee Name”

6. Get First_Name from employee table in upper case

7. Get First_Name from employee table in lower case.

8. Get unique DEPARTMENT from employee table

Queries solution:

3-> select * from employee;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance
5	Jerry	Pinto	65000	02/11/2014	Marketing
6	Philip	Mathew	45000	07/01/2014	Services
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

4-> select first_name,Last_name from employee;

FIRST_NAME	LAST_NAME
John	Abraham
Michael	Clarke
Roy	Thomas
Tom	Jose
Jerry	Pinto
Philip	Mathew
John	Henry
Ivan	Bayross

5-> select first_name "Employee Name" from employee;

Employee Name
John
Michael
Roy
Tom
Jerry
Philip
John
Ivan

6-> select lower(first_name) from employee;

LOWER(FIRST_NAME)
john
michael
roy
tom
jerry
philip
john
ivan

7-> select upper(first_name) from employee;

UPPER(FIRST_NAME)
JOHN
MICHAEL
ROY
TOM
JERRY
PHILIP
JOHN
IVAN

8-> select distinct department from employee;

DEPARTMENT
Insurance
Technical
Banking
Services
Sales
Marketing

---

9. **Queries of Employee table.**

1. Get all employee details from the employee table order by First_Name Ascending

2. Get all employee details from the employee table order by First_Name descending

3. Get all employee details from the employee table order by First_Name Ascending and Salary descending

4. Get employee details from employee table whose employee name is "John" (like)

5. Select * from EMPLOYEE where FIRST_NAME='John'

6. Get employee details from employee table whose employee name are "John" and "Roy"

7. Get employee details from employee table whose first name starts with 'J'

8. Get employee details from employee table whose first name contains 'o'

9. Get employee details from employee table whose first name ends with 'n'

10. Get employee details from employee table whose first name ends with 'n' and name contains 4 letters

11. Get employee details from employee table whose first name starts with 'J' and name contains 4 letters

12. Get employee details from employee table whose Salary greater than 60000

13. Get employee details from employee table whose Salary less than 80000

14. Get employee details from employee table whose Salary between 50000 and 80000

15. Get employee details from employee table whose name is 'John' and 'Michael'.

16. Get position of 'o' in name 'John' from employee table (skip)

17. Get employee details from employee table whose salary is minimum

18. Get employee details from employee table whose salary is maximum

19. Count the total number of department from employee table

20. Calculate the average salary of employee from employee

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance
5	Jerry	Pinto	65000	02/11/2014	Marketing
6	Philip	Mathew	45000	07/01/2014	Services
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

Queries solution:

1->[Get all employee details from the employee table order by First_Name Ascending]

->select * from employee order by first_name asc;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
8	Ivan	Bayross	60000	08/01/2015	Sales
5	Jerry	Pinto	65000	02/11/2014	Marketing
1	John	Abraham	100000	01/01/2013	Banking
7	John	Henry	55000	01/01/2015	Technical
2	Michael	Clarke	80000	04/01/2013	Insurance
6	Philip	Mathew	45000	07/01/2014	Services
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance

2->[Get all employee details from the employee table order by First_Name descending]

->select * from employee order by first_name desc;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
4	Tom	Jose	60000	12/08/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
6	Philip	Mathew	45000	07/01/2014	Services
2	Michael	Clarke	80000	04/01/2013	Insurance
7	John	Henry	55000	01/01/2015	Technical
1	John	Abraham	100000	01/01/2013	Banking
5	Jerry	Pinto	65000	02/11/2014	Marketing
8	Ivan	Bayross	60000	08/01/2015	Sales

3-> select * from employee order by first_name asc, salary desc;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
8	Ivan	Bayross	60000	08/01/2015	Sales
5	Jerry	Pinto	65000	02/11/2014	Marketing
1	John	Abraham	100000	01/01/2013	Banking
7	John	Henry	55000	01/01/2015	Technical
2	Michael	Clarke	80000	04/01/2013	Insurance
6	Philip	Mathew	45000	07/01/2014	Services
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance

4-> [Get employee details from employee table whose employee name is “John” (USING like H/W)]
->Select * from EMPLOYEE where FIRST_NAME='John';

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
7	John	Henry	55000	01/01/2015	Technical

5->same above query

6->[Get employee details from employee table whose employee name are “John” and “Roy”]

->select * from employee where first_name in('John','Roy');

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
3	Roy	Thomas	70000	05/21/2013	Banking
7	John	Henry	55000	01/01/2015	Technical

7->[Get employee details from employee table whose first name contains 'J']

->select * from employee where first_name like 'J%';

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
5	Jerry	Pinto	65000	02/11/2014	Marketing
7	John	Henry	55000	01/01/2015	Technical

8-> [H/W]

9->[Get employee details from employee table whose first name ends with 'n']

->select * from employee where first_name like '%n';

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

10->[10. Get employee details from employee table whose first name ends with 'n' and name contains 4 letters]

->select * from employee where first_name like '___n';
(hint:four underscore)

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

11->[Get employee details from employee table whose first name starts with 'J' and name contains 4 letters]

->select * from employee where first_name like 'J___';

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
7	John	Henry	55000	01/01/2015	Technical

12->[Get employee details from employee table whose Salary greater than 60000]

->select * from employee where salary>60000;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
5	Jerry	Pinto	65000	02/11/2014	Marketing

13->[Get employee details from employee table whose Salary less than 80000]

->select * from employee where salary<80000;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance
5	Jerry	Pinto	65000	02/11/2014	Marketing
6	Philip	Mathew	45000	07/01/2014	Services
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

14->[Get employee details from employee table whose Salary between 50000 and 80000]

->select * from employee where salary between 50000 and 80000;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance
5	Jerry	Pinto	65000	02/11/2014	Marketing
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

15->[Get employee details from employee table whose name is 'John' and 'Michael'.]

->select * from employee where first_name in('John','Michael');

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
2	Michael	Clarke	80000	04/01/2013	Insurance
7	John	Henry	55000	01/01/2015	Technical

16->[Get position of 'o' in name 'John' from employee table]

->select instr(first_name,'o') "position" from employee where first_name='John';

positio	Resu
2	
2	

17->[Get employee details from employee table whose salary is minimum]

->select * from employee where salary=(select min(salary) from employee);

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
6	Philip	Mathew	45000	07/01/2014	Services

18->[Get employee details from employee table whose salary is maximum]

->select * from employee where salary=(select max(salary) from employee);

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking

19->[Count the total number of department from employee table]

->select count(distinct(department)) "No of department" from employee;

No of department
6

20->[Calculate the average salary of employee from employee]

->select avg(salary)"Average Salary" from employee;

Average Salary
66875

10.	Queries
	1. Get First_Name from employee table in upper case 2. Get First_Name from employee table in lower case. 3. Get position of 'o' in name 'John' from employee table 4. Select first 3 characters of FIRST_NAME from EMPLOYEE

Queries solution:

1->[Get First_Name from employee table in upper case]

->select upper(first_name) from employee;

UPPER(FIRST_NAME)
JOHN
MICHAEL
ROY
TOM
JERRY
PHILIP
JOHN
IVAN

2->[Get First_Name from employee table in lower case.]

->select lower(first_name) from employee;

LOWER(FIRST_NAME)
john
michael
roy
tom
jerry
philip
john
ivan

3->[Get position of 'o' in name 'John' from employee table]

-> select instr(first_name,'o') "position" from employee where first_name='John';

positio	Resu
2	
2	

4->[Select first 3 characters of FIRST_NAME from EMPLOYEE]

-> select substr(first_name,1,3) from employee;

SUBSTR(FIRST_NAME,1,3)
Joh
Mic
Roy
Tom
Jer
Phi
Joh
Iva

5. Get FIRST_NAME from employee table after removing white spaces from right side

6. Get FIRST_NAME from employee table after removing white spaces from left side.

7. Get length of FIRST_NAME of all employees from employee table

8. Get First_Name from employee table after replacing 'o' with '$'

9. Get First_Name and Last_Name as single column from employee table separated by a '_'

10. Get FIRST_NAME ,Joining year, Joining Month and Joining Date from employee table separated by '_'

11. Get employee details from employee table whose joining year is "2013".

12. Get employee details from employee table whose joining month is "January"

13. Get employee details from employee table who joined before January 1st 2013

14. Get employee details from employee table who joined after January 31st

15. Get Joining Date and Time from employee table

16. Get difference between JOINING_DATE and INCENTIVE_DATE from employee and incentives table.

Queries solution:

5->[Get FIRST_NAME from employee table after removing white spaces from left side.]

->select ltrim(first_name,' ') from employee;

LTRIM(FIRST_NAME,")
John
Michael
Roy
Tom
Jerry
Philip
John
Ivan

6->[Get FIRST_NAME from employee table after removing white spaces from right side]

->select rtrim(first_name,' ') from employee;

RTRIM(FIRST_NAME,")
John
Michael
Roy
Tom
Jerry
Philip
John
Ivan

7->[Get length of FIRST_NAME of all employees from employee table]

->select length(first_name) "length", first_name from employee;

length	FIRST_NAME
4	John
7	Michael
3	Roy
3	Tom
5	Jerry
6	Philip
4	John
4	Ivan

8->[Get First_Name from employee table after replacing 'o' with '$']

->select first_name, replace(first_name,'o','$') from employee;

FIRST_NAME	REPLACE(FIRST_NAME,'O','$')
John	J$hn
Michael	Michael
Roy	R$y
Tom	T$m
Jerry	Jerry
Philip	Philip
John	J$hn
Ivan	Ivan

9->[Get First_Name and Last_Name as single column from employee table separated by a '_']

->select first_name|| '-' || last_name from employee;

FIRST_NAME||'-'||LAST_NAME
John-Abraham
Michael-Clarke
Roy-Thomas
Tom-Jose
Jerry-Pinto
Philip-Mathew
John-Henry
Ivan-Bayross

10->[Get FIRST_NAME ,Joining year, Joining Month and Joining Date from employee table separated by '_']

->select first_name,to_char(joining_date,'yyyy') "Joing Year",to_char(joining_date,'mon')"Month",to_char(joining_date,'dd') "Day" from employee;

FIRST_NAME	Joing Year	Month	Day
John	2013	jan	01
Michael	2013	apr	01
Roy	2013	may	21
Tom	2013	dec	08
Jerry	2014	feb	11
Philip	2014	jul	01
John	2015	jan	01
Ivan	2015	aug	01

11->[Get employee details from employee table whose joining year is “2013”.]

->select * from employee where to_char(joining_date,'yyyy')='2013';

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance

12->[Get employee details from employee table whose joining month is “January”]

->select * from employee where to_char(joining_date,'mon')='jan';

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
7	John	Henry	55000	01/01/2015	Technical

13->[Get employee details from employee table who joined before January 1st 2013]

->select * from employee where joining_date < to_date('01/01/2012','dd/mm/yyyy');

14->[Get employee details from employee table who joined after January 31st]

->select * from employee where joining_date > to_date('31/01/2013','dd/mm/yyyy');

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance
5	Jerry	Pinto	65000	02/11/2014	Marketing
6	Philip	Mathew	45000	07/01/2014	Services
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

15->[Get Joining Date and Time from employee table]

->select first_name,to_char(joining_date,'dd/mm/yyyy hh:mi:ss') "Joining Date with Time" from employee;

FIRST_NAME	Joining Date with Time
John	01/01/2013 12:00:00
Michael	01/04/2013 12:00:00
Roy	21/05/2013 12:00:00
Tom	08/12/2013 12:00:00
Jerry	11/02/2014 12:00:00
Philip	01/07/2014 12:00:00
John	01/01/2015 12:00:00
Ivan	01/08/2015 12:00:00

16-> [Get difference between JOINING_DATE and INCENTIVE_DATE from employee and incentives table.]

->select first_name,incentive_date-joining_date from employee e inner join incentives i on e.employee_no=i.employee_ref_id;

FIRST_NAME	INCENTIVE_DATE-JOINING_DATE
John	31
Michael	244
Roy	-81
Tom	468
Jerry	567

11.	Queries
	1. Find out how many employees are there in each department
	2. Find out total salary per department.
	3. Find out the average salary per department.
	4. Show list of departments who has more than 1 employee
	5. Show list of department whose total salary is greater than 50000
	6. Show list of department whose average salary is less than 50000
	7. Show list of department whose average salary is between 50000 and 80000
	8. Show the total no of employees whose joining month is same.
	9. Show the total no of employees whose joining year is same.
	10. Find total salary who have joined in same month
	11. Find total salary who have joined in same month and total salary is greater than 50000
	12. Select employee details from employee table if data exists in incentive table
	13. Display the employee name of all those who received their intencives
	14. Find out the employees who have their incentives less than 5000
	15. Update incentive table where employee name is 'John'
	16. Select first_name, incentive amount from employee and incentives table for those employees who have incentives

17. Select first_name, incentive amount from employee and incentives table for those employees who have
incentives and incentive amount greater than 3000
18. Select first_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount less than 3000
19. Select first_name, incentive amount from employee and incentives table for all employes even if they didn't get incentives

Queries solution:

1->[Find out how many employees are there in each department]

->select count(first_name) "No. of Employee",department from employee group by department;

No. of Employee	DEPARTMENT
2	Insurance
1	Technical
2	Banking
1	Services
1	Sales
1	Marketing

2->[Find out total salary per department.]

->select department,sum(salary) "Total Salary" from employee group by department;

DEPARTMENT	Total Salary
Insurance	140000
Technical	55000
Banking	170000
Services	45000
Sales	60000
Marketing	65000

3->[Find out the average salary per department.]

->select department,avg(salary) "Average Salary" from employee group by department;

DEPARTMENT	Average Salary
Insurance	70000
Technical	55000
Banking	85000
Services	45000
Sales	60000
Marketing	65000

4->[Show list of departments who has more than 1 employee]

-> select department from employee group by department having count(*)>1;

DEPARTMENT
Insurance
Banking

5->[Show list of department whose total salary is greater than 50000]

-> select department,sum(salary) "Total Salary >50000" from employee group by department having sum(salary)>50000;

DEPARTMENT	Total Salary >50000
Insurance	140000
Technical	55000
Banking	170000
Sales	60000
Marketing	65000

6->[Show list of department whose average salary is less than 50000]

-> select department,avg(salary) "Average Salary <50000" from employee group by department having avg(salary)<50000;

DEPARTMENT	Average Salary <50000
Services	45000

7-> **[Show list of department whose salary is between 50000 and 80000]**

->select * from employee where salary between 50000 and 80000;

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance
5	Jerry	Pinto	65000	02/11/2014	Marketing
7	John	Henry	55000	01/01/2015	Technical
8	Ivan	Bayross	60000	08/01/2015	Sales

8->[Show the total no of employees whose joining month is same.]

-> select count(employee_no) "No. of Employee",to_char(joining_date,'mon')"Same Month" from employee group by to_char(joining_date,'mon') having count(employee_no)>1;

No. of Employee	Same Month
2	jan

9->[Show the total no of employees whose joining year is same.]

-> select count(employee_no) "No. of Employee",to_char(joining_date,'yyyy') "Same Joing Year" from employee group by to_char(joining_date,'yyyy') having count(employee_no)>1;

No. of Employee	Same Joing Year
2	2014
2	2015
4	2013

10->[Find total salary who have joined in same month]

-> select sum(salary) "Total Salary",to_char(joining_date,'mon')"Same Month" from employee group by to_char(joining_date,'mon') having count(employee_no)>1;

Total Salary	Same Month
155000	jan

11->[Find total salary who have joined in same month and total salary is greater than 50000]

-> select sum(salary) "Total Salary > 50000",to_char(joining_date,'mon')"Same Month" from employee group by to_char(joining_date,'mon') having count(employee_no)>1 and sum(salary)>50000;

Total Salary > 50000	Same Month
155000	jan

12->[Select employee details from employee table if data exists in incentive table]

-> select * from employee where employee_no IN (select employee_ref_id from incentives);

EMPLOYEE_NO	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	100000	01/01/2013	Banking
2	Michael	Clarke	80000	04/01/2013	Insurance
3	Roy	Thomas	70000	05/21/2013	Banking
4	Tom	Jose	60000	12/08/2013	Insurance
5	Jerry	Pinto	65000	02/11/2014	Marketing

13->[Display the employee name of all those who received their intencives]

-> select first_name "Received Their Intencives" from employee where employee_no IN (select employee_ref_id from incentives);

Received Their Intencives
John
Michael
Roy
Tom
Jerry

14->[Find out the employees who have their incentives less than 5000]

-> select first_name"Incentive <5000" from employee where employee_no IN (select employee_ref_id from incentives where incentive_amount<5000);

Incentive <5000
Michael
Roy
Tom
Jerry

15->[Update incentive table where employee name is 'Roy']

-> update incentives set incentive_amount='5500' where employee_ref_id=(select employee_no from employee where first_name='Roy');

-> select * from incentives;

EMPLOYEE_REF_ID	INCENTIVE_DATE	INCENTIVE_AMOUNT
1	02/01/2013	5000
2	12/01/2013	3000
3	03/01/2013	5500
4	03/21/2015	4500
5	09/01/2015	3500

16->[Select first_name, incentive amount from employee and incentives table for those employees who have incentives]

-> select first_name,incentive_amount from employee e inner join incentives i on

e.employee_no=i.employee_ref_id;

FIRST_NAME	INCENTIVE_AMOUNT
John	5000
Michael	3000
Roy	5500
Tom	4500
Jerry	3500

17->[Select first_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000
]

-> select first_name,incentive_amount from employee e inner join incentives i on e.employee_no=i.employee_ref_id and incentive_amount >3000;

FIRST_NAME	INCENTIVE_AMOUNT
John	5000
Roy	5500
Tom	4500
Jerry	3500

18->[Select first_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount less than 4000]

-> select first_name,incentive_amount from employee e inner join incentives i on e.employee_no=i.employee_ref_id and incentive_amount <4000;

FIRST_NAME	INCENTIVE_AMOUNT
Michael	3000
Jerry	3500

19->[Select first_name, incentive amount from employee and incentives table for all employes even if they didn't get incentives]

-> select first_name,incentive_amount from employee e left join incentives i on e.employee_no=i.employee_ref_id ;

FIRST_NAME	INCENTIVE_AMOUNT
John	5000
Michael	3000
Roy	5500
Tom	4500
Jerry	3500
Philip	-
John	-
Ivan	-

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12. **Do the Following:**

Create a table as following:

Dept deptno	Dname	Loc
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

Emp_no	Ename	Job	Mgr	hiredate	Sal	Comm	Deptno
7839	King	President	-	17-11-1981	5000		10
7698	Blake	Manager	7839	01-05-1981	2850		30
7782	Clerk	Manager	7839	09-06-1981	2450		10
7566	Jones	Manager	7839	02-04-1981	2975		20
7788	Scott	Analyst	7566	13-07-1987	3000		20
7902	Ford	Analyst	7566	03-12-1981	3000		20
7369	Smith	Clerk	7902	17-12-1980	800		20
7499	Allen	Salesman	7698	20-02-1981	1600	300	30
7521	Ward	Salesman	7698	22-02-1981	1250	500	30
7654	Martin	Salesman	7698	28-09-1981	1250	1400	30
7844	Turnor	Salesman	7698	08-09-1981	1500		30
7876	Adams	Clerk	7788	13-07-1987	1100		20
7900	James	Clerk	7698	03-12-1981	950		30
7934	Miller	Clerk	7782	23-01-1982	1300		10

->Create table Department(Deptno number(3) primary key,Dname varchar2(15),Loc varchar2(15));

->describe Department;

->Insert records:

-> insert into Department(Deptno,Dname,Loc) values (10,'ACCOUNTING','NEW YORK');

-> insert into Department(Deptno,Dname,Loc) values (20,' RESEARCH ',' DALLAS');

-> insert into Department(Deptno,Dname,Loc) values (30,' SALES ',' CHICAGO');

-> insert into Department(Deptno,Dname,Loc) values (40,' OPERATIONS ',' BOSTON ');

->select * from Department;

->Create table Employee1(Emp_no number(5) primary key, Ename varchar2(10), Job varchar2(10), Mgr number(5), hiredate date, Sal number(5), Comm number(4), Deptno number(3) references Department);

-> describe Employee1;

1-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7839,'King','President','',TO_DATE('17-11-1981','DD/MM/YYYY'),5000,'',10);

->select * from Employee1;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	King	President	-	11/17/1981	5000	-	10

2-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7698,'Blake','Manager', 7839,TO_DATE('01-05-1981','DD/MM/YYYY'),2850,'',30);

3->

insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values

(7782,'Clerk','Manager', 7839,TO_DATE('09-06-1981','DD/MM/YYYY'),2450,'',10);

4-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7566,'Jones','Manager', 7839,TO_DATE('02-04-1981','DD/MM/YYYY'),2975,'',20);

5-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7788,'Scott','Analyst', 7566,TO_DATE('13-07-1987','DD/MM/YYYY'),3000,'',20);

6-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7902,'Ford','Analyst', 7566,TO_DATE('03-12-1981','DD/MM/YYYY'),3000,'',20);

7-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7369,'Smith','Clerk',7902,TO_DATE('17-12-1980','DD/MM/YYYY'),800,'',20);

8->

insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7499,'Allen','Salesman',7698,TO_DATE('20-02-1981','DD/MM/YYYY'),1600,300,30);

9-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7521,'Ward','Salesman',7698,TO_DATE('22-02-1981','DD/MM/YYYY'), 1250,500,30);

10-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7654,'Martin','Salesman',7698,TO_DATE('28-09-1981','DD/MM/YYYY'), 1250,1400,30);

11-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7844,'Turnor','Salesman',7698,TO_DATE('08-09-1981','DD/MM/YYYY'),1500,'',30);

12->

insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7876,'Adams','Clerk',7788,TO_DATE('13-07-1987','DD/MM/YYYY'),1100,'',20);

13-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7900,'James','Clerk',7698,TO_DATE('03-12-1981','DD/MM/YYYY'), 950,'',30);

14-> insert into Employee1(Emp_no, Ename, Job, Mgr, hiredate, Sal, Comm, Deptno) values (7934,'Miller','Clerk',7782,TO_DATE('23-01-1982','DD/MM/YYYY'), 1300,'',10);

Queries:

1. Select all record from emp table where deptno =10 or 40.
2. Select all record from emp table where deptno=30 and sal>1500.
3. Select all record from emp where job not in SALESMAN or CLERK.
4. Select all record from emp where ename in 'BLAKE','SCOTT','KING'and'FORD'
5. Select all records where ename starts with 'S' and its lenth is 6 char.
6. Select all records where ename may be any no of character but it should end with 'R'.
7. List the emps who are joined in the year 1981
8. List the emps who are joined in the month of Aug 1980
9. Display the avg salaries of all CLERKS
10. List all the emps except 'president' & 'Manager' in asc order of salaries
11. Count MGR and their salary in emp table.
12. In emp table add comm+sal as total sal.
13. Select any salary <3000 from emp table.
14. Select all salary <3000 from emp table.
15. Select all the employee group by deptno and sal in descending order.
16. List the emps who are working under Manager
17. List all the clerks of deptno 20
18. Find the 3rd MAX salary in the emp table.
19. Find the 3rd MIN salary in the emp table.

1->[Select all record from emp table where deptno =10 or 40.]

->select * from employee1 where deptno=10 or deptno=40;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7934	Miller	Clerk	7782	01/23/1982	1300	-	10
7782	Clerk	Manager	7839	06/09/1981	2450	-	10
7839	King	President	-	11/17/1981	5000	-	10

2->[Select all record from emp table where deptno=30 and sal>1500.]

->select * from employee1 where deptno=30 and sal>1500;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7698	Blake	Manager	7839	05/01/1981	2850	-	30
7499	Allen	Salesman	7698	02/20/1981	1600	300	30

3->[Select all record from emp where job not in SALESMAN or CLERK.]

->select * from employee1 where job not in ('Salesman','Clerk');

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7782	Clerk	Manager	7839	06/09/1981	2450	-	10
7566	Jones	Manager	7839	04/02/1981	2975	-	20
7788	Scott	Analyst	7566	07/13/1987	3000	-	20
7902	Ford	Analyst	7566	12/03/1981	3000	-	20
7839	King	President	-	11/17/1981	5000	-	10
7698	Blake	Manager	7839	05/01/1981	2850	-	30

4->[Select all record from emp where ename in 'BLAKE','SCOTT','KING'and'FORD']

->select * from employee1 where ename in ('Blake','Scott','King','Ford');

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7788	Scott	Analyst	7566	07/13/1987	3000	-	20
7902	Ford	Analyst	7566	12/03/1981	3000	-	20
7839	King	President	-	11/17/1981	5000	-	10
7698	Blake	Manager	7839	05/01/1981	2850	-	30

5->[Select all records where ename starts with 'S' and its lenth is 5 char.]

->select * from employee1 where ename like 'S%' and length (ename) =5;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7788	Scott	Analyst	7566	07/13/1987	3000	-	20
7369	Smith	Clerk	7902	12/17/1980	800	-	20

6->[Select all records where ename may be any no of character but it should end with 'R'.]

->select * from employee1 where ename like '%r';

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7844	Turnor	Salesman	7698	09/08/1981	1500	-	30
7934	Miller	Clerk	7782	01/23/1982	1300	-	10

7->[List the emps who are joined in the year 1981]

-> select * from employee1 where to_char(hiredate,'yyyy')='1981';

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7844	Turnor	Salesman	7698	09/08/1981	1500	-	30
7900	James	Clerk	7698	12/03/1981	950	-	30
7782	Clerk	Manager	7839	06/09/1981	2450	-	10
7566	Jones	Manager	7839	04/02/1981	2975	-	20
7902	Ford	Analyst	7566	12/03/1981	3000	-	20
7839	King	President	-	11/17/1981	5000	-	10
7698	Blake	Manager	7839	05/01/1981	2850	-	30
7499	Allen	Salesman	7698	02/20/1981	1600	300	30
7521	Ward	Salesman	7698	02/22/1981	1250	500	30
7654	Martin	Salesman	7698	09/28/1981	1250	1400	30

8->[List the emps who are joined in the month of Dec 1981]

-> select * from employee1 where to_char(hiredate,'yyyy')='1981' and to_char(hiredate,'Mon')='Dec';

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7900	James	Clerk	7698	12/03/1981	950	-	30
7902	Ford	Analyst	7566	12/03/1981	3000	-	20

9->[Display the avg salaries of all CLERKS]

->select avg(sal) from employee1 group by job having job='Clerk';

AVG(SAL)
1037.5

10->[List all the emps except ‘president’ & ‘Manager’ in asc order of salaries]

-> select * from employee1 where job not in ('President','Manager') order by sal asc;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	Smith	Clerk	7902	12/17/1980	800	-	20
7900	James	Clerk	7698	12/03/1981	950	-	30
7876	Adams	Clerk	7788	07/13/1987	1100	-	20
7521	Ward	Salesman	7698	02/22/1981	1250	500	30
7654	Martin	Salesman	7698	09/28/1981	1250	1400	30
7934	Miller	Clerk	7782	01/23/1982	1300	-	10
7844	Turnor	Salesman	7698	09/08/1981	1500	-	30
7499	Allen	Salesman	7698	02/20/1981	1600	300	30
7902	Ford	Analyst	7566	12/03/1981	3000	-	20
7788	Scott	Analyst	7566	07/13/1987	3000	-	20

11->[Count MGR and their total salary in emp table.]

-> select count(sal),sum(sal) from employee1 where job='Manager';

COUNT(SAL)	SUM(SAL)
3	8275

12->[In emp table add comm+sal as total sal.]

->select emp_no,ename,job,comm+sal "Total Sal" from employee1;

EMP_NO	ENAME	JOB	Total Sal	
7844	Turnor	Salesman		
7876	Adams	Clerk		
7900	James	Clerk		
7934	Miller	Clerk		
7782	Clerk	Manager		
7566	Jones	Manager		
7788	Scott	Analyst		
7902	Ford	Analyst		
7839	King	President		
7698	Blake	Manager		
7369	Smith	Clerk		
7499	Allen	Salesman	1900	
7521	Ward	Salesman	1750	
7654	Martin	Salesman	2650	

13-> [Select any salary <3000 from emp table.]

-> select * from employee1 where sal<3000;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7844	Turnor	Salesman	7698	09/08/1981	1500	-	30
7876	Adams	Clerk	7788	07/13/1987	1100	-	20
7900	James	Clerk	7698	12/03/1981	950	-	30
7934	Miller	Clerk	7782	01/23/1982	1300	-	10
7782	Clerk	Manager	7839	06/09/1981	2450	-	10
7566	Jones	Manager	7839	04/02/1981	2975	-	20
7698	Blake	Manager	7839	05/01/1981	2850	-	30
7369	Smith	Clerk	7902	12/17/1980	800	-	20
7499	Allen	Salesman	7698	02/20/1981	1600	300	30
7521	Ward	Salesman	7698	02/22/1981	1250	500	30
More than 10 rows available. Increase rows selector to view more rows.							

14->[Select all salary <3000 from emp table.]

->select * from employee1 where sal<3000;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7844	Turnor	Salesman	7698	09/08/1981	1500	-	30
7876	Adams	Clerk	7788	07/13/1987	1100	-	20
7900	James	Clerk	7698	12/03/1981	950	-	30
7934	Miller	Clerk	7782	01/23/1982	1300	-	10
7782	Clerk	Manager	7839	06/09/1981	2450	-	10
7566	Jones	Manager	7839	04/02/1981	2975	-	20
7698	Blake	Manager	7839	05/01/1981	2850	-	30
7369	Smith	Clerk	7902	12/17/1980	800	-	20
7499	Allen	Salesman	7698	02/20/1981	1600	300	30
7521	Ward	Salesman	7698	02/22/1981	1250	500	30
More than 10 rows available. Increase rows selector to view more rows.							

15->[Select all the employee group by deptno and sal in descending order.]

->select deptno,round(avg(sal),1) from employee1 group by deptno order by avg(sal) desc;

DEPTNO	ROUND(AVG(SAL),1)
10	2916.7
20	2175
30	1566.7

16->[List the emps who are working under Manager]

->select * from employee1 where mgr in (7566,7698,7782);

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7844	Turnor	Salesman	7698	09/08/1981	1500	-	30
7900	James	Clerk	7698	12/03/1981	950	-	30
7934	Miller	Clerk	7782	01/23/1982	1300	-	10
7788	Scott	Analyst	7566	07/13/1987	3000	-	20
7902	Ford	Analyst	7566	12/03/1981	3000	-	20
7499	Allen	Salesman	7698	02/20/1981	1600	300	30
7521	Ward	Salesman	7698	02/22/1981	1250	500	30
7654	Martin	Salesman	7698	09/28/1981	1250	1400	30

17->[List all the clerks of deptno 20]

->select * from employee1 where job='Clerk' and deptno=20;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7876	Adams	Clerk	7788	07/13/1987	1100	-	20
7369	Smith	Clerk	7902	12/17/1980	800	-	20

18->[Find the 3rd MAX salary in the emp table.]

->SELECT * FROM (SELECT * FROM EMPLOYEE1 ORDER BY SAL DESC) WHERE ROWNUM <=3;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	King	President	-	11/17/1981	5000	-	10
7788	Scott	Analyst	7566	07/13/1987	3000	-	20
7902	Ford	Analyst	7566	12/03/1981	3000	-	20

19->[Find the 3rd MIN salary in the emp table.]

->SELECT * FROM (SELECT * FROM EMPLOYEE1 ORDER BY SAL ASC) WHERE ROWNUM <=3;

EMP_NO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	Smith	Clerk	7902	12/17/1980	800	-	20
7900	James	Clerk	7698	12/03/1981	950	-	30
7876	Adams	Clerk	7788	07/13/1987	1100	-	20