

- 1) Display the location_id,street_address,city,state province and country for all the departments.
- 2) Display the first_name,department_id,department_name,stateprovince for all the employees.
- 3) Display the first_name,department_name and job_id for all employees who work in London.
- 4) Display the first_name and employee_id along with their manager's first_name and manager_id for those employees whose manager_id is not null. Give the proper heading.
- 5) Display the first_name and employee_id along with their manager's first_name and manager_id for all employees. Give the proper heading.
- 6) Display the employee last_name,department-id and all the employees who work in the same department as a given employee. Give proper heading.
- 7) Display the name and hire_date of the employees who were hired before Davies.
- 8) Display the name and hire_date of the employees who were hired before their managers along with their manager's name and hire-date.
- 9) Write a query that prompt the user to enter employees's last_name.The query then display the last_name and hire_date of any employee in the same department as that employee(Excluding It).
- 10) Display the employee_id,last_name and salary of all employees who earn more then the average salary and sort the result by salary ascending order.
- 11) Display the employee_id,last_name of all the employees who work in a department with any employee whoe last_name contains the letter 'x'.
- 12) Display the first-name,department_name,job_id and location_id of all the employees whose location_id is 1500.
- 13) Display the last_name and salary of each employee who report to King.
- 14) Display the department_id,last_name and job_id for employees in the executive department.
- 15) Display the list of all employees whose salary is less than the salary of any employee from department 55
- 16) Display the employee_id,first_name and salary of all employees who earn more than the average salary and who work in the department with any employee whose last_name contains the letter 'v'.
- 17) Display the department_id for all the department that do not contain the job_id SA_REP.

- 18) Display the list of countries that have no departments located in them.
- 19) Display the list of employees who are sales representative and are currently working the sales department

Extra Practice with Join

You have Given the syntax for creating table with constraints So just use this syntax to create the table, Insert the given data and practice it.

Example 1:

Below are three tables: Client, Bank and Bill. The question is based on these three tables.

Creating tables:

```
CREATE TABLE Client
(
  ClientID number,
  ClientName varchar2(255),
  Primary Key (ClientID)
);

CREATE TABLE Bank
(
  BranchID number,
  BranchName varchar2(255),
  ClientID number,
  Primary Key (BranchID),
  FOREIGN KEY (ClientID) REFERENCES Client (ClientID)
);

CREATE TABLE Bill
(
  InvoiceID number,
  Year date,
  BranchID number,
  Amount number,
  Primary Key (InvoiceID),
  FOREIGN KEY (BranchID) REFERENCES Bank(BranchID)
);
```

Inserting data into tables:

```
insert into Client values (1, 'O_A')
insert into Client values (2, 'O_B')
insert into Client values (3, 'O_C')
insert into Client values (4, 'O_D')
insert into Client values (5, 'O_E')
insert into Bank values (1, 'B_1', 1)
```

```

insert into Bank values (2, 'B_2', 2)
insert into Bank values (3, 'B_3', 3)
insert into Bank values (4, 'B_4', 4)
insert into Bank values (5, 'B_5', 5)
insert into Bill values (1, '01-jan-12', 1, 100)
insert into Bill values (2, '01-jan-13', 2, 200)
insert into Bill values (3, '01-jan-12', 3, 300)
insert into Bill values (4, '01-jan-17', 4, 400)
insert into Bill values (5, '01-jan-12', 5, 500)
insert into Bill values (6, '01-jan-12', 1, 900)
insert into Bill values (7, '01-jan-13', 1, 900)

```

Verifying data in the tables:

Select * from Client

ClientID	ClientName
1	O_A
2	O_B
3	O_C
4	O_D
5	O_E

Select * from Bank

BranchID	BranchName	ClientID
1	B_1	1
2	B_2	2
3	B_3	3
4	B_4	4
5	B_5	5

Select * from Bill

InvoiceID	Year	BranchID	Amount
1	01-jan-12	1	100
2	01-jan-13	2	200
3	01-jan-12	3	300
4	01-jan-17	4	400
5	01-jan-12	5	500
6	01-jan-12	1	900
7	01-jan-13	1	900

Question:

Retrieve all invoices from table bill for year 2012 and 2013 which belong to client 'O_A':

Count the Total no of invoices for branch id 1

Find the Total amount of invoice for each branchname.

Example 2:

Below are three tables: salesman, Client and Items. The questions below are based on these three tables.

Creating tables:

```
CREATE TABLE salesman
(
salesman_id number,
Name varchar2(255),
Age number,
Salary number,
Primary key (salesman_id)
);
CREATE TABLE Client
(
Cust_ID number,
Name varchar2(255),
City varchar2(255),
IndustryType char(1),
Primary key (Cust_ID)
);
CREATE TABLE Items
(
Number number,
Order_date date,
Cust_ID number,
salesman_id number,
Amount number,
Foreign Key (Cust_ID) references Client (Cust_ID),
Foreign Key (salesman_id) references salesman (salesman_id)
);
```

Inserting data into tables:

```
Insert into salesman values (1, 'Amir', 61, 140000)
Insert into salesman values (2, 'Balbir', 34, 44000)
Insert into salesman values (5, 'Chander', 34, 40000)
Insert into salesman values (7, 'Damdar', 41, 52000)
Insert into salesman values (8, 'Kumar', 57, 115000)
Insert into salesman values (11, 'Jaggu', 38, 38000)
Insert into Client values (4, 'Samsung','Delhi', 'J')
Insert into Client values (6, 'Panasonic','Orange', 'J')
```

Insert into Client values (7, 'Nokia','Jamshedpur', 'B')
 Insert into Client values (9, 'Apple','Jamshedpur', 'B')
 Insert into Items values (10, '02/aug/97', 4, 2, 540)
 Insert into Items values (20, '30/jan/96', 4, 8, 1800)
 Insert into Items values (30, '14/jul/94', 9, 1, 460)
 Insert into Items values (40, '29/jan/95', 7, 2, 2400)
 Insert into Items values (50, '03/feb/95', 6, 7, 600)
 Insert into Items values (60, '02/mar/95', 6, 7, 720)
 Insert into Items values (70, '06/may/95', 9, 7, 150)

Verifying data in the tables:

Select * from Items

Number	Order_date	Cust_ID	salesman_id	Amount
10	02/aug/97	4	2	540
20	30/jan/96	4	8	1800
30	14/jul/94	9	1	460
40	29/jan/95	7	2	2400
50	03/feb/95	6	7	600
60	02/mar/95	6	7	720
70	06/may/95	9	7	150

Select * from Client

Cust_ID	Name	City	IndustryType
4	Samsung	Delhi	J
6	Panasonic	Orange	J
7	Nokia	Jamshedpur	B
9	Apple	Jamshedpur	B

Select * from Salesman

salesman_id	Name	Age	Salary
1	Amir	61	140000
2	Balbir	34	44000
5	Chander	34	40000
7	Damdar	41	52000
8	Kumar	57	115000
11	Jaggu	38	38000

Question 1:

Get the names of all salespersons that have an order with Samsung.

Question 2:

Get the names of all salespersons that do not have any order with Samsung.

Question 3:

Get the names of salespersons that have 2 or more orders.

Question 4:

Find the third highest salary:

Question 5:

Find the third lowest salary:

Example 3:

CREATE TABLE A

(
A1 number,
);

CREATE TABLE B

(
B1 number,
);

Insert into A values (1)

Insert into A values (2)

Insert into A values (3)

Insert into A values (4)

Insert into B values (3)

Insert into B values (4)

Insert into B values (5)

Insert into B values (6)

Select * from A

A1
1
2
3
4

Select * from B

B1
3
4
5
6

Question 1:

What will be the query and result of inner join between tables A and B?

Question 2:

What will be the query and result of full outer join between tables A and B?

Question 3:

What will be the query and result of left outer join between tables A and B?