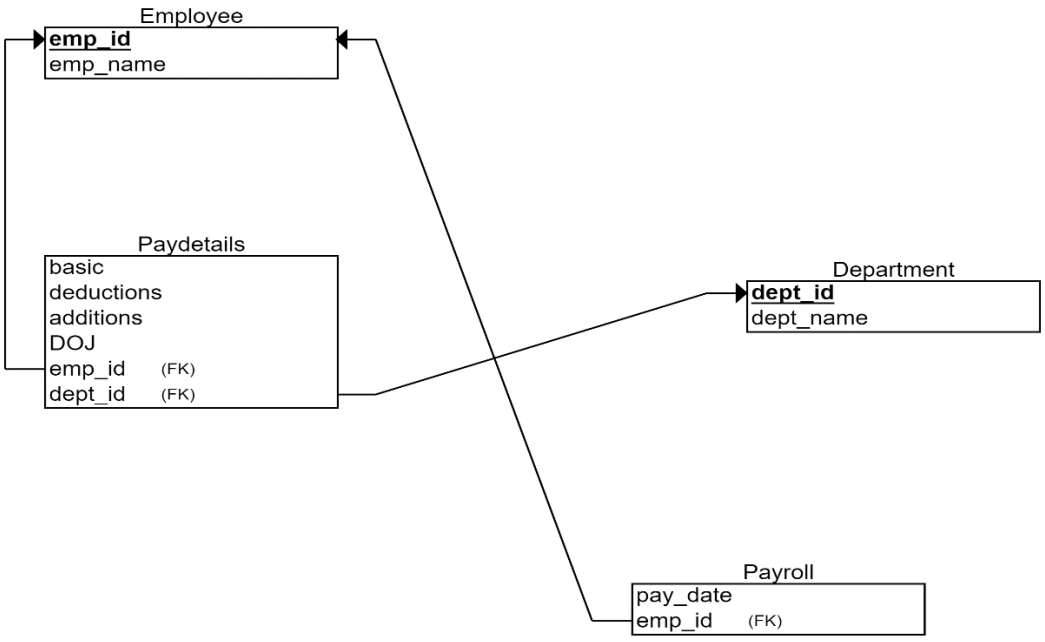
EMPLOYEE-PAY SCENARIO

a)

Neatly sketch schema diagram and identify join relationship among tables.



b)

Create the tables with the appropriate integrity constraints

```
1  create table employee(emp_id int primary key,emp_name varchar2(20));
2  create table department(dept_id int primary key,dept_name varchar2(20));
3  create table paydetails(emp_id int references employee(emp_id),dept_id int references department(dept_id),
4   bas int,deductions int,addition int,doj date);
5  create table payroll(emp_id int references employee(emp_id),pay_date date);
```

Results | Explain | Describe | Saved SQL | History

Table created.

c)

Insert around 10 records in each of the tables

```
create table employee(emp_id int primary key,emp_name varchar2(20));
insert into employee values(1,'a');insert into employee values(2,'b');
insert into employee values(3,'c');insert into employee values(4,'d');
insert into employee values(5,'e');insert into employee values(6,'f');
insert into employee values(7,'g');insert into employee values(8,'h');
insert into employee values(9,'i');insert into employee values(10,'j');
create table department(dept_id int primary key,dept_name varchar2(20));
insert into department values(11,'aa');insert into department values(12,'bb');
insert into department values(13,'cc');insert into department values(14,'dd');
insert into department values(15,'ee');insert into department values(16,'ff');
insert into department values(17,'gg');insert into department values(18,'hh');
insert into department values(19,'ii');insert into department values(20,'jj');
create table paydetails(emp_id int references employee(emp_id),dept_id int references department(dept_id),
 bas int,deductions int,addition int,doj date);
insert into paydetails values(1,11,100,200,300,'03-25-2024');insert into paydetails values(2,12,100,200,300,'03-24-2024');
insert into paydetails values(3,13,100,200,300,'03-23-2024');insert into paydetails values(4,14,100,200,300,'03-22-2024');
insert into paydetails values(5,15,100,200,300,'03-25-2024');insert into paydetails values(6,16,100,200,300,'03-21-2024');
insert into paydetails values(7,17,100,200,300,'03-20-2024');insert into paydetails values(9,11,100,200,300,'03-25-2024');
insert into paydetails values(8,18,100,200,300,'03-22-2024');insert into paydetails values(10,20,100,200,300,'03-21-2024');
 create table payroll(emp_id int references employee(emp_id),pay_date date);
 insert into payroll values(11,'03-21-2024'); insert into payroll values(11,'03-22-2024');
 insert into payroll values(12,'03-20-2024'); insert into payroll values(12,'03-20-2024');
 insert into payroll values(13,'03-23-2024'); insert into payroll values(13,'03-22-2024');
 insert into payroll values(14,'03-24-2024'); insert into payroll values(14,'03-26-2024');
 insert into payroll values(15,'03-25-2024'); insert into payroll values(15,'03-27-2024');
```

Results | Explain | Describe | Saved SQL | History

1 row(s) inserted.

d)

List the employee details department wise

```
select e.emp_id,emp_name from employee e inner join paydetails p on e.emp_id=p.emp_id order by p.dept_id;
```

Results | Explain | Describe | Saved SQL | History

EMP_ID	EMP_NAME
1	a
1	a
1	a
1	a

e)

List all the employee names who joined after particular date

```
select emp_name from employee e inner join paydetails p on e.emp_id=p.emp_id where doj>'03-21-2024';
```

Results | Explain | Describe | Saved SQL | History

EMP_NAME
a
b
d

f)

List the details of employees whose basic salary is between 10,000 and 20,000

```
35  select e.emp_id,emp_name from employee e inner join paydetails p on e.emp_id=p.emp_id where bas>=10000 and bas<=20000;
```

Results | Explain | Describe | Saved SQL | History

EMP_ID	EMP_NAME
1	a
1	a

g)

Give a count of how many employees are working in each department

```
37  select p.dept_id,count(e.emp_id) from employee e inner join paydetails p on e.emp_id=p.emp_id group by p.dept_id;
```

Results | Explain | Describe | Saved SQL | History

DEPT_ID	COUNT(E.EMP_ID)
14	1
15	1
11	6
12	1

h)

Give a names of the employees whose netsalary>10,000

```
39  select emp_name from employee e inner join paydetails p on e.emp_id=p.emp_id where bas+addition>10000;
```

Results | Explain | Describe | Saved SQL | History

EMP_NAME
a
a

i)

List the details for an employee id=5

```
41  select emp_name,e.emp_id,dept_id,bas,deductions,addition,doj from employee e inner join  paydetails p on e.emp_id=p.emp_id where e.emp_id=5;
```

Results | Explain | Describe | Saved SQL | History

EMP_NAME	EMP_ID	DEPT_ID	BAS	DEDUCTIONS	ADDITION	DOJ
e	5	15	100	200	300	03/25/2024

j)

Create a view which lists out the emp_name, department, basic, deductions, netsalary

```
43  create view employeeeee as select emp_name,dept_id,bas,deductions,bas+addition as netsalary from employee,paydetails;
44
```

Results | Explain | Describe | Saved SQL | History

View created.

k)

Create a view which lists the emp_name and his netsalary

```
45  create view viewwww as select emp_name,bas+addition as nesalary from employee,paydetails;
```

Results | Explain | Describe | Saved SQL | History

iew created.