Table – employeedetails

EmpId	FullName	ManagerId	DateOfJoining	City
121	John Snow	321	01/31/2014	Toronto
321	Walter White	986	01/30/2015	California
421	Kuldeep Rana	876	27/11/2016	New Delhi

Table – employeesalary

EmpId	Project	Salary	Variable
121	P1	8000	500
321	P2	10000	1000
421	P1	12000	0

Creating Database and tables

```
create database sql_q_for_interview;

create table employeedetails(
  EmpID integer primary key,
  FullName varchar(30),
  ManagerID integer,
  DateOfJoining DATE,
  City Varchar (15)
  );

create table employeesalary(
  EmpID integer primary key,
  Project varchar(10),
  Salary integer,
  variable integer
  );
```

Inserting values to tables

```sql
insert into employeedetails
values(121,'John Snow',321,'2014-01-31','Toronto');

insert into employeedetails
values(321,'Walter White',986,'2015-01-30','California');

insert into employeedetails
values(421,'Kuldeep Rana',876,'2016-11-27','New Delhi');

select * from employeedetails;
```

```sql
insert into employeesalary
values(121,'P1',8000,500);

insert into employeesalary
values(321,'P2',10000,1000);

insert into employeesalary
values(421,'P1',12000,0);

select * from employeesalary;
```

-- Question 1

```sql
-- question 1
-- write sql query to fetch the EmpId and FullName of all the employees
-- working under Manager with id - '986'

select EmpID, FullName
from employeedetails
where EmpID in
(
  select EmpID from employeedetails
  where ManagerID = 986
);
```

-- Question 2

```sql
-- question 2
-- write an sql query to fetch the different projects
-- available from the employeesalary table

select distinct Project
from employeesalary;
```

-- Question 3

```sql
-- question 3
-- write an sql query to fetch the count
-- of employees working in project 'P1'

select count(*) total_employee
from employeesalary
where EmpID in (
  select EmpID from employeesalary
  where Project = 'P1'
);
```

-- Question 4

```sql
-- question 4
-- write an sql query to find the
-- maximum, minimum, and average salary of the employees

select max(Salary) as Max_salary,
min(Salary) as Min_Salary,
avg(salary) as AVG_Salary
from employeesalary;
```

-- Question 5

```sql
-- question 5
-- write an sql query to find the employee id
-- whose salary lies in the range of 9000 and 15000

select *
from employeesalary;

select EmpID, Salary
from employeesalary
where Salary in
(
  select Salary from employeesalary
  where Salary between 9000 and 15000
);
```

-- Question 6

```sql
-- question 6
-- write and sql query to fetch those employees who live in toronto
-- and work under manager with ManagerID - '321'

select EmpID, City, ManagerID
from employeedetails
where ManagerID in
(
  select ManagerID from employeedetails
  where ManagerID = '321'
  and City = 'Toronto'
);
```

-- Question 7

```sql
-- question 7
-- write and sql query to fetch all the employees who live in california
-- or work under a manager with ManagerID - '321'

select EmpID, City, ManagerID
from employeedetails
where ManagerID in
(
  select ManagerID from employeedetails
  where City = 'California'
  or ManagerID = 321
);
```

-- Question 8

```sql
-- question 8
-- write an sql query to fetch all those employees
-- who work on project other than 'P1'

select EmpID, Project
from employeesalary
where Project not in
(
  select Project from employeesalary
  where Project = 'P1'
);
```

-- Question 9

```sql
-- question 9
-- write and sql query to display the total salary of each employee
-- adding the salary with variable value

select EmpID, Salary+'$' as TotalSalary
from employeesalary;
```

-- Question 10

```sql
-- question 10
-- write an sql query to fetch the employees whose name begins with any two characters,
-- followed by a text "hn" and aending with any sequence of characters

select FullName
from employeedetails
where FullName like '__hn%';
```

-- Question 11

```sql
-- question 11
-- write and sql query to fetch all the EmpIDs which are present
-- in either of the tables - 'employeedetails' and 'employeesalary'

SELECT EmpId FROM EmployeeDetails
UNION
SELECT EmpId FROM EmployeeSalary;
```

-- Question 12

```sql
-- question 12
-- write an sql query to fetch common record between two tables

select *
from employeesalary
where EmpID in
(
  select EmpID from ManagerSalary
);
```

-- Question 13

```sql
-- question 13
-- write an sql query to fetch records that are present
-- in one table but not in another table

select es.*
from employeesalary es
join employeedetails ed
on es.EmpID = ed.EmpID
where es.EmpID in
(
  select ed.EmpID is null
);
```

-- Question 14

```sql
-- question 14
-- write an sql query to fetch the EmpIDs that are present in both
-- the tables 'employeedetails' and 'employeesalary'

select EmpID
from employeedetails
where EmpID in
(
  select EmpID from employeesalary
);
```

-- Question 15

```sql
-- question 15
-- write an sql query to fetch the EmpIDs that are present in 'employeedetails'
-- but not in the 'employeesalary'

select EmpID
from employeedetails
where EmpID not in
(
  select EmpID from employeesalary
);
```

-- Question 16

```sql
-- question 16
-- write an sql query to fetch the employee full names
-- and replace the space with '-'

select replace(FullName,' ','-')
from employeedetails;
```

-- Question 17

```
208 -- question 17
209 -- write an sql query to fetch the position of a given
210 -- character(s) in a field
211
212 select instr(FullName,'Walter')
213 from employeedetails;
```

-- Question 18

```
215 -- question 18
216 -- write an sql query to display both
217 -- the EmpID and ManagerID together
218
219 select concat(EmpID, ManagerID) as NewID
220 from employeedetails;
```

-- Question 19

```
222 -- question 19
223 -- write a query to fetch only the first name (string before space)
224 -- from the FullName column of the employeedetails table
225
226 select mid(FullName, 1, locate(' ',FullName))
227 from employeedetails;
```

-- Question 20

```
229 -- question20
230 -- write an sql query to uppercase the name of the employee
231 -- and lowercase the city values
232
233 select upper(FullName), lower(City)
234 from employeedetails;
```

-- Question 21

```sql
-- question 21
-- fetch all the employees who are not working on any project

select *
from employeedetails
where EmpId in
(
  select EmpID from employeesalary
  where Project != 'P1' and 'P2'
);
```

-- Question 22

```sql
-- question 22
-- write an sql query to fetch employee names
-- having a salary greater than or equal to 5000 and less than or equal to 10000

select FullName
from employeedetails
where EmpID in
(
  select EmpID from employeesalary
  where Salary between 5000 and 10000
);
```

-- Question 23

```sql
-- question 23
-- write an sql query to find the current date time

select current_date();
```

-- Question 24

```sql
-- question 24
-- write an sql query to fetch all the employee details from employemployeedetails
-- table who joined in the year 2020

select * from employeedetails
where
(
  select year(DateOfJoining)='2020'
);
```

-- Question 25

```sql
-- question 25
-- write an sql query to fetch all the employee record from empemployeedetails
-- table who have a salary record in employeesalary table

select * from employeedetails ed
where exists
(
  select * from employeesalary es
  where ed.EmpID = es.EmpID
);
```

-- Question 26

```sql
-- question 26
-- write an sql query to fetch project-wise count of employees
-- sorted by project's count in descending order

select Project, count(EmpID) TotalEmployee
from employeesalary
group by Project
order by TotalEmployee Desc;
```

-- Question 27

```sql
-- question 27
-- write a query to fetch employee names and salary records
-- display the employee details even if the salary record is not present for the employee

select ed.FullName, es.Salary
from employeedetails ed
left join employeesalary es
on ed.EmpID = es.EmpID;
```

-- Question 28

```sql
-- question 28
-- write an sql query to join 3 tables

select a.EmpID, b.Salary, c.ManagerID
from employeedetails a
join (employeesalary b cross join managerdetails c)
on (a.EmpID = b.EmpID and b.ManagerID = c.ManagerID);
```

-- Question 29

```sql
-- question 29
-- write an sql query to fetch all the employees
-- who are also managers from employeedetails table

select *
from employeedetails
where EmpID in
(
  select ManagerID from employeedetails
);
```

-- Question 30

```sql
-- question 30
-- write an sql query to fetch duplicate records from empemployeedetails
-- (without considering the primary key - 'EmpID')

select FullName, ManagerId, DateOfJoining, City, count(*) Total
from employeedetails
group by FullName, ManagerID, DateOfJoining, City
having count(*) > 0;
```

-- Question 31

```sql
-- question 31
-- write an sql query to fetch only odd rows from the table

select es.EmpID, es.Project, es.Salary
from(
  select *, Row_Number() over(order by EmpID) as RowNumber
  from employeesalary
) es
where es.RowNumber % 2 = 1;
```

-- Question 32

```sql
-- question 32
-- write an sql query to fetch only even rows from the table

select es.EmpID, es.Project, es.Salary
from(
  select *, Row_Number() over(order by EmpID) as RowNumber
  from employeesalary
) es
where es.RowNumber % 2 = 0;
```

-- Question 33

```sql
-- question 33
-- write an sql query to create a new table
-- with data and structure copied from another table

create table employeesalaryduplicate
select * from employeesalary;
```