Create Database

```
create database Zooplehr;
```

Create Table "Employee personal"

```
USE zooplehr;

CREATE TABLE employee_personal (
    ID INT PRIMARY KEY,
    firstname VARCHAR(20),
    lastname VARCHAR(20),
    gender CHAR(1),
    dob DATE,
    email VARCHAR(100),
    phone VARCHAR(20)
);
```

Create Table "Employee Job"

```
create table employee_job (
    id int primary key,
    department varchar(50),
    job varchar (50),
    salary int,
    hiredate date,
    terminationdate date,
    foreign key (id) references employee_personal (id)
    );
```

Insert Data into Table "Employee Personal"

```
INSERT INTO employee_personal (id, FirstName, LastName, Gender, dob, Email, Phone) VALUES
(101, 'Sini', 'Babu', 'F', '1995-07-20', 'sinibabu@gmail.com', '9123456789'),
(102, 'Anu', 'Joseph', 'F', '1993-05-15', 'anujoseph@gmail.com', '9123456790'),
(103, 'Deepak', 'Varma', 'M', '1990-03-25', 'deepakvarma@gmail.com', '9123456791'),
(104, 'Reena', 'Kurian', 'F', '1996-09-10', 'reenakurian@gmail.com', '9123456792'),
(105, 'Riyas', 'Khan', 'M', '1989-12-30', 'riyaskhan@gmail.com', '9123456793'),
(106, 'Anjali', 'Menon', 'F', '1994-08-18', 'anjalimenon@gmail.com', '9123456794'),
(107, 'Vishnu', 'Das', 'M', '1992-11-05', 'vishnudas@gmail.com', '9123456795'),
(108, 'Lisha', 'Mathew', 'F', '1991-04-22', 'lishamathew@gmail.com', '9123456796'),
(109, 'Arjun', 'Nair', 'M', '1997-06-12', 'arjunnair@gmail.com', '9123456797'),
(110, 'Meera', 'Sasidharan', 'F', '1993-10-28', 'meerasasi@gmail.com', '9123456798'),
```

```
(111, 'Sudeep', 'Krishna', 'M', '1988-02-14', 'sudeepkrishna@gmail.com', '9123456799'),
(112, 'Gayathri', 'Mohan', 'F', '1995-01-09', 'gayathrimohan@gmail.com', '9123456800'),
(113, 'Rahul', 'Pillai', 'M', '1990-07-01', 'rahulpillai@gmail.com', '9123456801'),
(114, 'Neethu', 'John', 'F', '1992-03-17', 'neethujohn@gmail.com', '9123456802'),
(115, 'Jithin', 'Thomas', 'M', '1994-12-05', 'jithinthomas@gmail.com', '9123456803');
```

Insert Data into Table "Employee Job"

```
INSERT INTO employee_job (id, Department, Job, Salary, HireDate, TerminationDate) VALUES
(101, 'HR', 'HR Assistant', 28000, '2020-03-15', NULL),
(102, 'Finance', 'Accountant', 32000, '2019-06-01', NULL),
(103, 'IT', 'Software Engineer', 45000, '2018-11-10', NULL),
(104, 'Marketing', 'Marketing Executive', 30000, '2021-04-05', NULL),
(105, 'Sales', 'Sales Executive', 31000, '2020-02-20', '2023-07-01'),
(106, 'IT', 'UI Designer', 40000, '2019-08-15', NULL),
(107, 'Finance', 'Financial Analyst', 35000, '2017-12-10', NULL),
(108, 'HR', 'Recruiter', 29000, '2022-01-05', NULL),
(109, 'IT', 'Backend Developer', 46000, '2020-06-01', NULL),
(110, 'Marketing', 'Content Strategist', 30500, '2019-05-15', NULL),
(111, 'Sales', 'Sales Manager', 50000, '2016-09-01', '2022-12-31'),
(112, 'Finance', 'Payroll Officer', 34000, '2021-03-18', NULL),
(113, 'IT', 'Data Analyst', 43000, '2020-10-01', NULL),
(114, 'HR', 'HR Manager', 38000, '2018-07-07', '2025-06-08'),
(115, 'Marketing', 'Social Media Manager', 31000, '2023-02-01', '2025-06-09');
```

Data Modifications

Unique for Email

```
alter table employee_personal ADD unique (email);
```

Data Type change of Phone number as INT

```
alter table employee_personal modify phone bigint;
```

Update Salary for an Employee. ID 109 = 12000 amount increase.

```
select *from employee_job where id=109;
```

Check NULL values in TerminationDate of employee_job

```
select * from employee_job
where terminationdate is null;
```

Check NULL values in salary and experience of employee_job

```
select * from employee_job
where salary is null or experience is null;
```

Rename

```
update employee_personal
set lastname ="R Menon"
where id = 106;
```

Add a new column to employee personal table

```
ALTER TABLE employee_job ADD COLUMN experience VARCHAR(255);
```

Adding values into experience column

```
UPDATE employee_job SET experience = 5 WHERE id = 101;
UPDATE employee_job SET experience = 3 WHERE id = 102;
UPDATE employee_job SET experience = 5 WHERE id = 103;
UPDATE employee_job SET experience = 3 WHERE id = 104;
UPDATE employee_job SET experience = 5 WHERE id = 105;
UPDATE employee_job SET experience = 3 WHERE id = 106;
UPDATE employee_job SET experience = 5 WHERE id = 107;
UPDATE employee_job SET experience = 3 WHERE id = 108;
UPDATE employee_job SET experience = 5 WHERE id = 109;
UPDATE employee_job SET experience = 3 WHERE id = 110;
UPDATE employee_job SET experience = 5 WHERE id = 111;
UPDATE employee_job SET experience = 3 WHERE id = 112;
UPDATE employee_job SET experience = 5 WHERE id = 113;
UPDATE employee_job SET experience = 3 WHERE id = 114;
UPDATE employee_job SET experience = 5 WHERE id = 115;
select* from employee_job;
```

Join the Tables

```
select * from employee_personal
right join employee_job
ON employee_personal.id= employee_job.id;
```

Update Salary

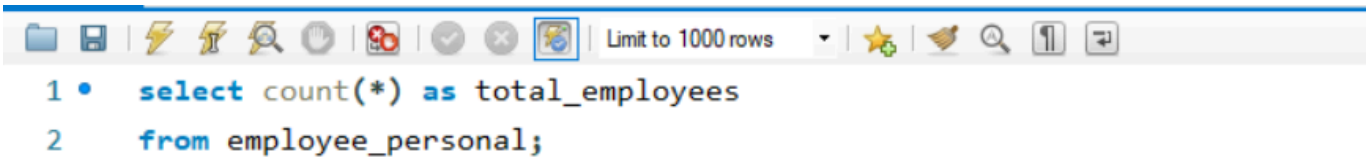
```
UPDATE employee_job
SET Salary = Salary + 5000
```

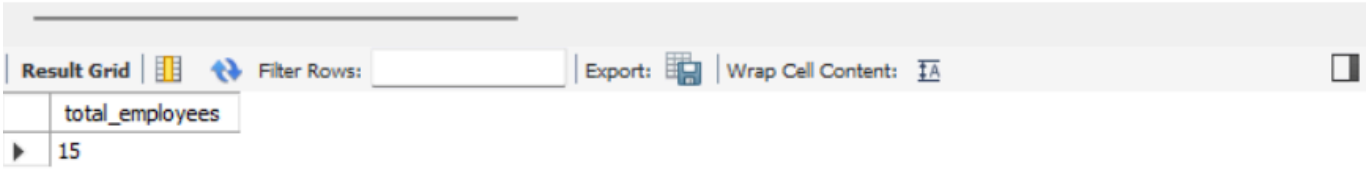
```
WHERE ID = 115;

SELECT * FROM employee_job WHERE ID = 115;
```

Analysis

1. How many employees are there in total?

```
select count(*) as total_employees
from employee_personal;
```



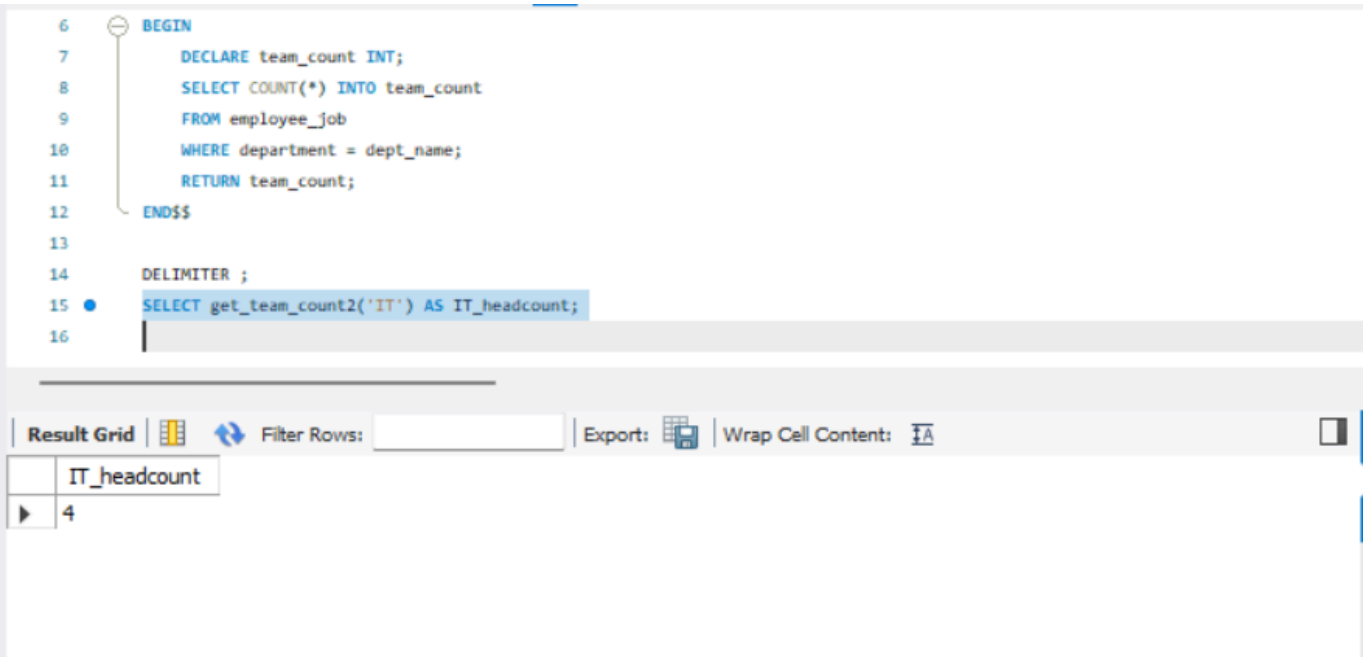


Ans:15

2. What is the headcount of IT department?

```
DELIMITER $$

CREATE FUNCTION get_team_count2(dept_name VARCHAR(30))
RETURNS INT
DETERMINISTIC
BEGIN
    DECLARE team_count INT;
    SELECT COUNT(*) INTO team_count
    FROM employee_job
```

```
    WHERE department = dept_name;
    RETURN team_count;
END$$

DELIMITER ;



SELECT get_team_count2('IT') AS IT_headcount;
```



Ans:

- Finance-3
- HR-3
- IT-4
- Marketing-3
- Sales-2

3. What is the average salary per department?

```
select department, AVG(salary) as averagesalary
from employee_job
group by department;
```

```
select department, AVG(salary) as averagesalary
from employee_job
group by department;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

department	averagesalary
HR	31666.6667
Finance	33666.6667
IT	43500.0000
Marketing	32166.6667
Sales	40500.0000

Ans:

Finance- 33666.6667

HR- 31666.6667

IT- 46500.0000

Marketing- 30500.0000

Sales- 40500.0000

4. What is the gender distribution?

```
select gender, count(*) as genderdistribution
from employee_personal
group by gender;
```

```
select gender, count(*) as genderdistribution
from employee_personal
group by gender;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

gender	genderdistribution
F	8
M	7

Female-8

Male-7

5. List top 5 highest-paid employees.

```
select id, salary
from employee_job
order by salary desc
limit 5;
```

```
select id, salary
from employee_job
order by salary desc
limit 5;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch

id	salary
111	50000
109	46000
103	45000
113	43000
106	40000

109 IT 58000

111 Sales 50000

103 IT 45000

113 IT 43000

106 IT 40000

6. Which departments have more than 1 employee?

```
select department, count(*) as employeecount
from employee_job
group by department
having count(*)>1
order by employeecount desc;
```

```
select department, count(*) as employeecount
from employee_job
group by department
having count(*)>1
order by employeecount desc;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

department	employeecount
IT	4
HR	3
Finance	3
Marketing	3
Sales	2

IT 4

HR 3

Marketing 3

Finance 3

Sales 2

7. Who are the employees earning above the average salary?

```
select * from employee_job
where salary > (select avg(salary)
from employee_job);
```

```
select * from employee_job
where salary > (select avg(salary)
from employee_job);
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

id	department	job	salary	hiredate	terminationdate	experience
103	IT	Software Engineer	45000	2018-11-10	NULL	5
106	IT	UI Designer	40000	2019-08-15	NULL	3
109	IT	Backend Developer	46000	2020-06-01	NULL	5
111	Sales	Sales Manager	50000	2016-09-01	2022-12-31	5
113	IT	Data Analyst	43000	2020-10-01	NULL	5
114	HR	HR Manager	38000	2018-07-07	2025-06-08	3

IT 103 Software Engineer 45000

IT 106 UI Designer 40000

IT 109 Backend Developer 58000

Sales 111 Sales Manager 50000

IT 113 Data Analyst 43000

114 HR Manager 38000

8. Number of employees hired each year

```
select year(hiredate) as hiredate,count(*) as hiredemployees
from employee_job
group by year (hiredate)
order by year (hiredate);
```

```
select year(hiredate) as hiredate,count(*) as hiredemployees
from employee_job
group by year (hiredate)
order by year (hiredate);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

hiredate	hiredemployees
2016	1
2017	1
2018	2
2019	3
2020	4
2021	2
2022	1
2023	1

Create a full view and Exporting into CSV Filw

```
CREATE VIEW full_employee_view AS
SELECT
    ep.ID,
    ep.firstname,
    ep.lastname,
    ep.gender,
    ep.dob,
    ep.email,
    ep.phone,
    ej.department,
    ej.job,
    ej.salary,
    ej.hiredate,
    ej.terminationdate,
    ej.experience
FROM employee_personal ep
JOIN employee_job ej
    ON ep.ID = ej.id;

select* from full_employee_view;
```

```sql
CREATE VIEW full_employee_view AS
SELECT
    ep.ID,
    ep.firstname,
    ep.lastname,
    ep.gender,
    ep.dob,
    ep.email,
    ep.phone,
    ej.department,
    ej.job,
    ej.salary,
    ej.hiredate,
    ej.terminationdate,
    ej.experience
```