```
--department
create table department(
dept_id int,
dept_name varchar(100) unique not null,
constraint dept_pk primary key(dept_id)
);
-- Insert values into department table
INSERT INTO department (dept_id, dept_name) VALUES
(1, 'HR'),
(2, 'Finance'),
(3, 'IT'),
(4, 'Marketing'),
(5, 'Sales');


--employees
create table employees(
emp_id int,
first_name varchar(50),
last_name varchar(50),
dept_id int,
salary numeric(10,2),
hire_date date default current_date,
constraint emp_pk primary key(emp_id),
constraint emp_fk foreign key(dept_id) references department(dept_id)
);
-- Insert values into employee table
INSERT INTO employees (emp_id, first_name, last_name, dept_id, salary) VALUES
(101, 'Arun', 'Kumar', 1, 50000),
(102, 'Saranya', 'Devi', 2, 60000),
(103, 'Muthu', 'Vel', 3, 55000),
(104, 'Kalai', 'Selvi', 4, 52000),
(105, 'Sureash', 'Kumar', 5, 58000);
```

```
--questions
--query1
create procedure insert_new_dept(
dept_id int,
dept_name varchar(100)
)
language plpgsql
as $$
begin
insert into department values(dept_id,dept_name);
end;$$;

call insert_new_dept(6,'Devlopment');

 dept_id | dept_name
---------+------------
       1 | HR
       2 | Finance
       3 | IT
       4 | Marketing
       5 | Sales
       6 | Devlopment
(6 rows)
```

```
--query2
create or replace function get_emp(department_name varchar)
returns table(
emp_id int,
first_name varchar,
last_name varchar,
dept_id int,
salary numeric,
hire_date date
)
language plpgsql
as  $$
begin
return query
select e.emp_id,e.first_name,e.last_name,e.dept_id,e.salary,e.hire_date from employees e
join department d
on e.dept_id=d.dept_id
where d.dept_name=department_name;
end;
$$;

 select get_emp('IT');

                get_emp
---------------------------------------
 (103,Muthu,Vel,3,55000.00,2025-08-29)
(1 row)
```

```
--query 3
create or replace procedure add_salary(department_name varchar)
language plpgsql
as $$
begin
    update employees e
    set salary = salary + salary * 0.1
    from department d
    where e.dept_id = d.dept_id
     and d.dept_name = department_name;
end;
$$;


call add_salary('IT');

 emp_id | first_name | last_name | dept_id |  salary  | hire_date
--------+------------+-----------+---------+----------+------------
    101 | Arun       | Kumar     |       1 | 50000.00 | 2025-08-29
    102 | Saranya    | Devi      |       2 | 60000.00 | 2025-08-29
    103 | Muthu      | Vel       |       3 | 55000.00 | 2025-08-29
    104 | Kalai      | Selvi     |       4 | 52000.00 | 2025-08-29
    105 | Sureash    | Kumar     |       5 | 58000.00 | 2025-08-29
(5 rows)
```

```
--query 4
create or replace function add_emp(
emp_id int,
first_name varchar,
last_name varchar,
dept_id int,
salary numeric,
hire_date date
)
returns void
language plpgsql
as $$
begin
insert into employees values(emp_id,first_name,last_name,dept_id,salary,hire_date);
end;
$$;

select add_emp(106,'Tamil','Mathi',null,40000,'2025-08-29');
```

emp_id	first_name	last_name	dept_id	salary	hire_date
101	Arun	Kumar	1	50000.00	2025-08-29
102	Saranya	Devi	2	60000.00	2025-08-29
103	Muthu	Vel	3	55000.00	2025-08-29
104	Kalai	Selvi	4	52000.00	2025-08-29
105	Sureash	Kumar	5	58000.00	2025-08-29
106	Tamil	Mathi		40000.00	2025-08-29

(6 rows)

```
--query 5
create or replace procedure del_dept()
language plpgsql
as $$
begin
delete from department d
where not exists(select 1 from employees e where d.dept_id=e.dept_id);
end;
$$;

call del_dept();

 dept_id | dept_name
---------+-----------
       1 | HR
       2 | Finance
       3 | IT
       4 | Marketing
       5 | Sales
(5 rows)
```

```
--query 6
create or replace function emp_count(department_name varchar)
returns int
language plpgsql
as $$
declare
count_emp int;

begin
select count(e.emp_id) into count_emp from employees e
join department d
on e.dept_id=d.dept_id
where d.dept_name=department_name;
return count_emp;
end;
$$;

select emp_count('IT');
 emp_count
-----------
         2
(1 row)
```

```
--query 7
create or replace function tot_salary(department_name varchar)
returns numeric
language plpgsql
as $$
declare
tot_sal numeric;
begin
select sum(e.salary) into tot_sal from employees e
join department d
on e.dept_id=d.dept_id
where d.dept_name=department_name;
return tot_sal;
end;
$$;

select tot_salary('IT');

 tot_salary
------------
   95000.00
(1 row)
```

```
--query 8
create or replace function hire_emp(h_date date)
returns table(
emp_id int,
first_name varchar,
last_name varchar,
dept_id int,
salary numeric,
hire_date date
)
language plpgsql
as $$
begin
return query
select e.emp_id,e.first_name,e.last_name,e.dept_id,e.salary,e.hire_date from employees e
where e.hire_date>h_date;
end;
$$;

select hire_emp('2025-08-19');

                hire_emp
----------------------------------------
 (101,Arun,Kumar,1,50000.00,2025-08-29)
 (102,Saranya,Devi,2,60000.00,2025-08-29)
 (103,Muthu,Vel,3,55000.00,2025-08-29)
 (104,Kalai,Selvi,4,52000.00,2025-08-29)
 (105,Sureash,Kumar,5,58000.00,2025-08-29)
 (106,Tamil,Mathi,3,40000.00,2025-08-29)
(6 rows)
```