Phase 2 Project
Pramod KC (50437964)

This is my 2nd phase of my project, my project is hospital management system. I have all together 13 tables. I have taken snapshot of all the table I have created and inserted the 3 data entities in each table.

```
pramod.kc=> \d
                List of relations
 Schema |      Name      | Type  |    Owner
--------+----------------+-------+-------------
 public | doctor         | table | pramod.kc
 public | employee       | table | pramod.kc
 public | guide          | table | pramod.kc
 public | medicine       | table | pramod.kc
 public | nurse          | table | pramod.kc
 public | patient        | table | pramod.kc
 public | pays_for       | table | pramod.kc
 public | receptnist     | table | pramod.kc
 public | record         | table | pramod.kc
 public | room           | table | pramod.kc
 public | room_class     | table | pramod.kc
 public | take_care      | table | pramod.kc
 public | treatment      | table | pramod.kc
(13 rows)
```

```
pramod.kc=> select * from doctor;
  intern     |    guest      |  parmanent  | id_number
-------------+---------------+-------------+-----------
 Dr.Raffel   |               |             | E7
             | DR.Jenesse    |             | E21
             |               | DR.KC       | EF41
(3 rows)

pramod.kc=> select * from guide;
  id   | room_number
-------+-------------
 2345  | N1
 2346  | N2
 2307  | N3
(3 rows)

pramod.kc=> select * from medicine;
    name      | time_to_take |  type
--------------+--------------+--------
 Paravitamin  | 9 am         | Energy
 Gulcose      | 12 pm        | Energy
 Paracetamol  | 8 pm         | fever
(3 rows)
```

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```
pramod.kc=> select *from  nurse;
 intern | guest | parmanent | id_number
--------+-------+-----------+-----------
 ronny  |       |           | N1
        | Bunny |           | N2
        |       | Honney    | N3
(3 rows)

pramod.kc=> Select * from patient;
      name        | patient_id_number |    address     | phone_number |  sex  | admitted_date | discharged_date | age
------------------+-------------------+----------------+--------------+-------+---------------+-----------------+-----
 Janny            | p3                | NYC Joe        |    879564356 | male  | Feb 3         | Feb 26          |  21
 Rabi             | p1                | NYC Jonsebor   |    879544356 | male  | Jan 3         | Jan 26          |  29
 James            | p21               | NYC Wallstreet |    879504356 | male  | Jan 31        | Feb 30          |  79
(3 rows)

pramod.kc=> Select * from pays-for;
ERROR:  syntax error at or near "-"
LINE 1: Select * from pays-for;
                          ^
pramod.kc=> Select * from pays_for;
    name      | patient_id_number
--------------+-------------------
 Paravitamin  | p1
 Gulcose      | p2
 Paracetamol  | p3
(3 rows)
```

```
pramod.kc=> select * from record;
 record_no |            appointment_with
-----------+----------------------------------------------
 E7        | DR.Raffel
 E8        | DR.Janesses
 E9        | DR.KC
(3 rows)

pramod.kc=> select * from room;
 room_number
-------------
 9756
 9654
 9346
(3 rows)

pramod.kc=> select * from room_class;
 general | first_class | second_class | room_number
---------+-------------+--------------+-------------
(0 rows)
```

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```
pramod.kc=> select * from take_care;
 record_no | id_number
-----------+-----------
 E7        | E21
 E8        | E7
 E9        | EF41
(3 rows)

pramod.kc=> Select * from treatment;
 id_number | patient_id_number
-----------+-------------------
 E7        | p1
 E21       | p3
 EF41      | p2
(3 rows)
```

1.Find all the Employees' names.

```
pramod.kc=> select name from employee;
         name
----------------------
 Peter
 Rambo
 Adil
 Dr.KC
 Dr.Raffel
 Dr.Jenesse
(6 rows)

pramod.kc=>
```

```
pramod.kc=> select * from employee;
     name   | id_number |     address          |  sex    | office_hours | specialization_field | salary  | phone_number
------------+-----------+----------------------+---------+--------------+----------------------+---------+--------------
 Peter      | 56784     | d Street             | Male    |            9 | Cardeologist         |   40000 |      8704237
 Rambo      | 56794     | ad Street            | Male    |           10 | Phesotheraphist      | 5000000 |      1704237
 Adil       | 16794     | ADCD Street          | Female  |           10 | Phesotheraphist      |  500000 |      2704237
 Dr.KC      | EF41      | Walking loads Street | Male    |            3 | Dentist              |  700000 |      4704237
 Dr.Raffel  | E7        | Walking Street       | Female  |           10 | Physothirapist       |  800000 |      5704237
 Dr.Jenesse | E21       | Walking dead Street  | Male    |            5 | Cardiologist         |  600000 |      3704237
(6 rows)

pramod.kc=>
```

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2. Find salary of peter.

```
pramod.kc=> select salary from employee where name = 'Peter';
 salary
--------
  40000
(1 row)
```

3. Find all the Employee who are dentist.

```
pramod.kc=> select name from employee where specialization_field = 'Dentist';
         name
----------------------
 Dr.KC
(1 row)

pramod.kc=>
```

4. Find the employee who lives in d street.

```
pramod.kc=> select name from employee where address = 'd Street';
         name
----------------------
 Peter
(1 row)

pramod.kc=>
```

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5. **Find all the Employee who are Phesotheraphist**

```
pramod.kc=> select name from employee where specialization_field = 'Phesotheraphist';
         name
---------------------
 Rambo
 Adil
(2 rows)

pramod.kc=>
```

6. **6.Find all the Employee whose office hours is less than 10. 6.Find all the Employee whose office hours is less than 10.**

```
pramod.kc=> select name from employee where office_hours < 10;
         name
---------------------
 Peter
 Dr.KC
 Dr.Jenesse
(3 rows)

pramod.kc=>
```

7. **Find all the Employee whose salary is less than 100000.**

```
pramod.kc=> select name from employee where salary < 100000
         name
---------------------
 Peter
(1 row)
```

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8. **Find the Employee whose id is EF41 and is Dentist.**

```
pramod.kc=> select name from employee where id_number = 'EF41'and specialization_field = 'Dentist';
        name
-----------------------
 Dr.KC
(1 row)

pramod.kc=> 
```

9. **Find the Employee whose salary is above 50,000 and office hour is greater than 3.**

```
pramod.kc=> select name from employee where salary > 500000 and office_hours > 3;
        name
-----------------------
 Rambo
 Dr.Raffel
 Dr.Jenesse
(3 rows)

pramod.kc=> 
```

10. **Find the addresses, and names for those who are dentist.**

```
pramod.kc=> select name, address from employee where specialization_field = 'Dentis
        name        |       address
--------------------+----------------------
 Dr.KC              | Walking loads Street
(1 row)
```

11. **Find the address of the doctor who gives treatment to the patient_id_number**

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p1

```
pramod.kc=> select address from treatment, employee where patient_id_number = 'p1' and treatment.id_number = employee.id_number;
    address
----------------
 Walking Street
(1 row)

pramod.kc=>
```

.

12. Find the office_hour of the doctor who gives treatment to the patient_id_number p2.

```
pramod.kc=> select office_hours from treatment, employee where patient_id_number = 'p2' and treatment.id_number = employee.id_number;
 office_hours
--------------
            3
(1 row)
```

13.Find the name,office hour of the doctor who gives treatment to the patient_id_number p3.

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```
pramod.kc=> select office_hours,name from employee,treatment where patient_id_number = 'p3' and treatment.id_number = employee.id_number;
 office_hours |       name
--------------+--------------------
            5 | Dr.Jenesse
(1 row)
```

14.Find the name, office hour and Specialization of the doctor who gives treatment to the patient_id_number p2 who is the patient of cardio. Is the doctor chosen for this operation is good to take treatment?

```
pramod.kc=> select office_hours,name,specialization_field from employee,treatment where patient_id_number = 'p2' and treatment.id_number = employee.id_number;
 office_hours |       name       | specialization_field
--------------+------------------+----------------------
            3 | Dr.KC            | Dentist
(1 row)
```

No the doctor is not good to do operation since he is dentist and the patient is having problem about cardio.

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15. Find Name and address of those employee, whose salary is more than the average salary with the help of subquery ALL.

```
pramod.kc=> Select name, address from employee where salary >= ALL (select avg(salary) from employee);
        name         |  address
---------------------+-----------
 Rambo               | ad Street
(1 row)
```

16 Select name of the employee who are not guide with the use of NOT EXISTS subquery.

```
pramod.kc=> Select name from employee where not EXISTS ( select id from guide where id = id_number);
        name
---------------------
 Peter
 Rambo
 Adil
 Dr.KC
 Dr.Raffel
 Dr.Jenesse
(6 rows)

pramod.kc=>
```

17.Select all the employee data except for those employees who have minimum salary?

```
pramod.kc=> SELECT * from employee where salary > any (select salary from employee);
    name    | id_number |     address        |  sex   | office_hours | specialization_field | salary  | phone_number
------------+-----------+--------------------+--------+--------------+----------------------+---------+--------------
 Rambo      | 56794     | ad Street          | Male   |           10 | Phesotheraphist      | 5000000 |      1704237
 Adil       | 16794     | ADCD Street        | Female |           10 | Phesotheraphist      |  500000 |      2704237
 Dr.KC      | EF41      | Walking loads Street| Male   |            3 | Dentist              |  700000 |      4704237
 Dr.Raffel  | E7        | Walking Street     | Female |           10 | Physothirapist       |  800000 |      5704237
 Dr.Jenesse | E21       | Walking dead Street| Male   |            5 | Cardiologist         |  600000 |      3704237
(5 rows)
```

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18. Find ID , office_hours and Salary of those employee who are involved in treatments with the help of IN subquery.

```
pramod.kc=> Select name, office_hours, Salary from employee where id_number IN(Select treatment.id_number from treatment where employee.id_number=treatment.id_number);
        name        | office_hours | salary
--------------------+--------------+--------
 Dr.KC              |            3 | 700000
 Dr.Raffel          |           10 | 800000
 Dr.Jenesse         |            5 | 600000
(3 rows)

pramod.kc=>
```

19. Find the name of the medicines which are EXISTS in pays for with the use of EXIST subquery.

```
pramod.kc=> Select medicine.name from medicine where exists (select name from pays_for where pays_for.name = medicine.name);
     name
--------------
 Paravitamin
 Gulcose
 Paracetamol
(3 rows)

pramod.kc=>
```

20.Find hospital rooms which are not used in guiding purpose with the help of NOT IN subquery.

```
pramod.kc=> Select id from guide where ID not IN(select room_number from room where room.room_number =guide.room_number);
  id
------
 2345
 2346
 2307
(3 rows)

pramod.kc=>
```

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21.Find all the IDS of the employees (with reputation allows) who are also taking care of patients with the help of UNION ALL Subquery.

```
pramod.kc=> Select id_number from employee UNION all select id_number from take_care;
 id_number
-----------
 56784
 56794
 16794
 EF41
 E7
 E21
 E21
 E7
 EF41
(9 rows)
```

22. Find the id of the Employees that are not taking care of patients with the help of EXCEPT sub Query.

```
pramod.kc=> Select id_number from employee except select id_number from take_care;
 id_number
-----------
 16794
 56794
 56784
(3 rows)
```

23. Find the common ids which are in Employee as well as taking care of person list.

```
pramod.kc=> Select id_number from employee intersect select id_number from take_care;
 id_number
-----------
 E7
 E21
 EF41
(3 rows)

pramod.kc=>
```

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24, Select all medicines names which are in medicines as well as in pays for with the use of UNION (without repetition of medicine name)

```
pramod.kc=> select name from pays_for UNION select name from medicine;
     name
-------------
 Paravitamin
 Paracetamol
 Gulcose
(3 rows)

pramod.kc=>
```

25. Find name of the all medicines since which are in medicines but not in pays for with the help of EXCEPT subquery.

```
pramod.kc=> select name from pays_for except select name from medicine;
 name
------
(0 rows)

pramod.kc=>
```