6. Create a view for student names with their subjects' names which they will study.

```
postgres=# create view student_subject as
postgres-# select student.e_name, subject.sub_name
postgres-# from stu_sub
postgres-# inner join student
postgres-# on stu_sub.stu_id = student.id
postgres-# inner join subject
postgres-# on stu_sub.sub_id = subject.id;
CREATE VIEW
```

```
postgres=# select * from student_subject;
   e_name    | sub_name
-------------+----------
 Abdelrahman | html
 Abdelrahman | css
 Abdelrahman | js
(3 rows)
```

7. Create a view for tracks names and the subjects which belong to it.

```
postgres=# create view track_subject as
select track.track_name, subject.sub_name
from track_sub
inner join track
on track_sub.track_id = track.id
inner join subject
on track_sub.sub_id = subject.id;
CREATE VIEW
```

```
postgres=# select * from track_subject;
 track_name | sub_name
------------+----------
 python     | html
 python     | css
 python     | js
(3 rows)
```

==========

Write a query to find out which subjects are not associated with any track.

```
postgres=# select subject.sub_name, track.track_name
from track_sub
inner join track
on track_sub.track_id = track.id
right join subject
on track_sub.sub_id = subject.id
postgres-# where track.track_name is null;
       sub_name       | track_name
----------------------+------------
 presentaion_skills   |
 communication_skills |
(2 rows)
```

Display name and age of each students

```
postgres=# select e_name, age(student.birth_date) as age
from student;
   e_name    |           age
-------------+-------------------------
 Abdelrahman | 26 years 14 days
 Ahmed       | 25 years 3 mons 29 days
 abdullah    | 23 years 6 mons 29 days
 maruim      | 11 years 9 mons 22 days
 orabi       | 33 years 6 mons 29 days
 majed       | 33 years 7 mons
(6 rows)
```

Display the name of students with their rounded score in each subject

```
postgres=# select student.e_name, subject.sub_name, round(grades.grade) as rounded_grade
from grades
inner join subject
on grades.sub_id = subject.id
inner join student
on grades.stu_id = student.id;
   e_name    | sub_name | rounded_grade
-------------+----------+--------------
 Abdelrahman | html     |           90
 Abdelrahman | css      |           85
 Abdelrahman | js       |           80
(3 rows)
```

Display the name of students with the year of Birthdate

```
postgres=# select e_name, extract(year from birth_date) as birth_year
postgres-# from student;
   e_name    | birth_year
-------------+------------
 Abdelrahman |       1999
 Ahmed       |       2000
 abdullah    |       2001
 maruim      |       2013
 orabi       |       1991
 majed       |       1991
(6 rows)
```

Add new exam result, in date column use NOW() function

```
postgres=# insert into exam(date)
postgres-# values(now());
INSERT 0 1
postgres=# select * from exam;
 id |    date
----+------------
  1 | 2025-04-29
  2 | 2025-04-30
  3 | 2025-05-01
  4 | 2025-04-30
(4 rows)
```

The time part is truncated because it is data type changed date

Write a query to calculate the average grade obtained by a specific student across all exams.

```
postgres=# select student.e_name, avg(grades.grade) as avg_grade
from grades
inner join student
on grades.stu_id = student.id
group by student.e_name;
   e_name    |      avg_grade
-------------+---------------------
 Abdelrahman | 85.0000000000000000
(1 row)
```

Write a query to replace all occurrences of 'gmail.com' in email addresses with 'iti.com'.

```
postgres=# update student
postgres-# set email = replace(email, 'gmail.com', 'iti.com');
UPDATE 6
postgres=# select e_name, email
postgres-# from student;
   e_name    |        email
-------------+---------------------
 Abdelrahman | aaabod199950@iti.com
 Ahmed       |
 abdullah    |
 maruim      |
 orabi       |
 majed       |
(6 rows)
```

Write a query to calculate the difference in days between the current date and each exam date.

```
postgres=# select *, age(exam.date, date(now())) as days_left
from exam;
 id |    date    | days_left
----+------------+-----------
  3 | 2025-05-01 | 1 day
  1 | 2025-05-02 | 2 days
  2 | 2025-05-03 | 3 days
  4 | 2025-05-25 | 25 days
(4 rows)
```

Write a query to check if each student's email address ends with '.com'.

```
postgres=# select e_name, email,
postgres-# case
postgres-# when email like '%.com' then 'yes'
postgres-# else 'no'
postgres-# end as end_with_com
postgres-# from student;
   e_name    |        email         | end_with_com
-------------+----------------------+--------------
 Abdelrahman | aaabod199950@iti.com | yes
 Ahmed       |                      | no
 abdullah    |                      | no
 maruim      |                      | no
 orabi       |                      | no
 majed       |                      | no
(6 rows)
```

Display each exam date like ‘MM/DD/YYYY’.

```
postgres=# select id, to_char(exam.date, 'MM/DD/YYYY') as date
from exam;
 id |    date
----+------------
  3 | 05/01/2025
  1 | 05/02/2025
  2 | 05/03/2025
  4 | 05/25/2025
(4 rows)
```