Sql Querys

-Student Table

```
mysql> select * from student;
+------+---------+-------+------+
| id   | name    | level | age  |
+------+---------+-------+------+
|  111 | ahmed   | 2nd   |   20 |
|  222 | rana    | 2nd   |   20 |
|  333 | ali     | 1st   |   19 |
|  444 | amir    | 1st   |   19 |
|  555 | reem    | 3rd   |   21 |
|  666 | hassan  | 3rd   |   21 |
|  777 | arwa    | 4th   |   22 |
|  888 | omar    | 4th   |   22 |
|  999 | mohamed | 5th   |   23 |
| 1010 | malk    | 5th   |   23 |
+------+---------+-------+------+
10 rows in set (0.01 sec)
```

_____

2- Admission Table

```
mysql> select * from admission;
+--------------+------------+---------------+-----------------+--------+
| admission_id | student_id | starting_date | graduation_date | status |
+--------------+------------+---------------+-----------------+--------+
|          100 |       1010 | 2024-01-01    | 2029-01-01      | paid   |
|          121 |        111 | 2022-01-01    | 2026-01-01      | paid   |
|          122 |        222 | 2022-01-01    | 2025-01-01      | paid   |
|          133 |        333 | 2022-01-01    | 2025-01-01      | paid   |
|          144 |        444 | 2024-01-01    | 2028-01-01      | paid   |
|          155 |        555 | 2022-01-01    | 2026-01-01      | paid   |
|          166 |        666 | 2024-01-01    | 2029-01-01      | paid   |
|          177 |        777 | 2024-01-01    | 2028-01-01      | paid   |
|          188 |        888 | 2023-01-01    | 2028-01-01      | paid   |
|          199 |        999 | 2024-01-01    | 2028-01-01      | paid   |
+--------------+------------+---------------+-----------------+--------+
10 rows in set (0.00 sec)
```

3- Courses Table

```
mysql> select * from courses;
+------+------------------+-------+
| id   | name             | hours |
+------+------------------+-------+
| 123  | Ai               |     3 |
| 345  | Os               |     3 |
| 567  | web              |     3 |
| 789  | database         |     3 |
| 910  | datascience      |     3 |
| 1011 | datastructure    |     3 |
| 1112 | math0            |     2 |
| 1213 | psychology       |     2 |
| 1314 |  pure math       |     3 |
| 1415 | Community issues |     2 |
+------+------------------+-------+
10 rows in set (0.00 sec)
```

4- Instructors Table

```
mysql> select * from instructors;
+-------+---------+--------+
| id    | name    | salary |
+-------+---------+--------+
|  1357 | maged   |   7000 |
|  2468 | amira   |   9000 |
|  1010 | sama    |   6000 |
|  1000 | farida  |   6000 |
|  2310 | farah   |   8000 |
|  6893 | youssef |   4000 |
|  8425 | lina    |   3000 |
|  9137 | hany    |   6000 |
|  7220 | alaa    |   6000 |
|  4792 | john    |   5000 |
+-------+---------+--------+
10 rows in set (0.00 sec)
```

1. Salary of instructors

```
mysql> select name , salary from instructors  order by salary desc ;
+---------+--------+
| name    | salary |
+---------+--------+
| amira   |   9000 |
| farah   |   8000 |
| maged   |   7000 |
| sama    |   6000 |
| farida  |   6000 |
| hany    |   6000 |
| alaa    |   6000 |
| john    |   5000 |
| youssef |   4000 |
| lina    |   3000 |
+---------+--------+
10 rows in set (0.00 sec)
```

2. Students and their admission status

```
mysql> select s.id as student_id,s.name,s.level,s.age,a.starting_date,a.status,
    -> a.graduation_date from student s join admission a on s.id = a.student_id;
+------------+---------+-------+------+---------------+--------+-----------------+
| student_id | name    | level | age  | starting_date | status | graduation_date |
+------------+---------+-------+------+---------------+--------+-----------------+
|        111 | ahmed   | 2nd   |   20 | 2022-01-01    | paid   | 2026-01-01      |
|        222 | rana    | 2nd   |   20 | 2022-01-01    | paid   | 2025-01-01      |
|        333 | ali     | 1st   |   19 | 2022-01-01    | paid   | 2025-01-01      |
|        444 | amir    | 1st   |   19 | 2024-01-01    | paid   | 2028-01-01      |
|        555 | reem    | 3rd   |   21 | 2022-01-01    | paid   | 2026-01-01      |
|        666 | hassan  | 3rd   |   21 | 2024-01-01    | paid   | 2029-01-01      |
|        777 | arwa    | 4th   |   22 | 2024-01-01    | paid   | 2028-01-01      |
|        888 | omar    | 4th   |   22 | 2023-01-01    | paid   | 2028-01-01      |
|        999 | mohamed | 5th   |   23 | 2024-01-01    | paid   | 2028-01-01      |
|       1010 | malk    | 5th   |   23 | 2024-01-01    | paid   | 2029-01-01      |
+------------+---------+-------+------+---------------+--------+-----------------+
10 rows in set (0.00 sec)
```

3. Students that will graduate on a specific year

```
mysql> select * from admission where graduation_date = '2029-1-1' ;
+--------------+------------+---------------+-----------------+--------+
| admission_id | student_id | starting_date | graduation_date | status |
+--------------+------------+---------------+-----------------+--------+
|          100 |       1010 | 2024-01-01    | 2029-01-01      | paid   |
|          166 |        666 | 2024-01-01    | 2029-01-01      | paid   |
+--------------+------------+---------------+-----------------+--------+
2 rows in set (0.01 sec)
```

4. Students in level 2 who are older than 19

```
mysql> select name , level from student where age >19 and level = '2nd' ;
+-------+-------+
| name  | level |
+-------+-------+
| ahmed | 2nd   |
| rana  | 2nd   |
+-------+-------+
2 rows in set (0.01 sec)
```

5. Average salary for the instructors

```
mysql> select Avg(salary) as average_salary from instructors ;
+----------------+
| average_salary |
+----------------+
|      6000.0000 |
+----------------+
1 row in set (0.02 sec)
```

6. Number of courses

```
mysql> select count(*) as total_courses from courses;
+---------------+
| total_courses |
+---------------+
|            10 |
+---------------+
1 row in set (0.02 sec)
```