

Ascendeum Tech Interview 1

Query 1 : -- Write a query to calculate the average age of employees in each department.

```
select d.name, avg(e.age)
from employees e
join departments d
  on e.department_id = d.id
group by e.department_id;
```

Query 2 : -- Write a query to find the department with the highest number of employees whose age is above 40.

```
select d.name, count(e.id) as total_employees
from employees e
join departments d
  on e.department_id = d.id
where e.age > 40
group by e.department_id
order by count(e.id) desc
limit 1;
```

Query 3 : -- Write a query to retrieve the count of employees who have joined in last 100 days.

```
select count(*)
from employees
where joining_date >= date(now()) - interval 100 day;
```

Query 4 : -- Write a query to update the joining date of all employees in the HR department to the yesterday.

update employees

set joining_date = date(now()) - interval 1 day

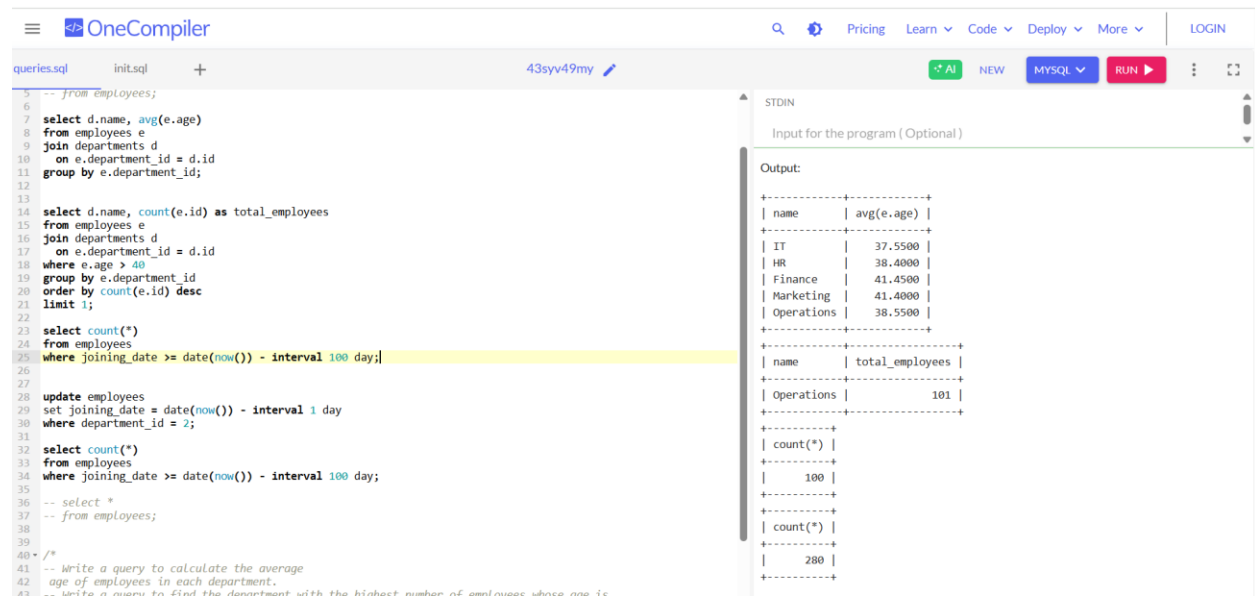
where department_id = 2;

Query 5 : -- Write a query to retrieve the count of employees who have in joined in last 100 days.

select count(*)

from employees

where joining_date >= date(now()) - interval 100 day;



The screenshot shows the OneCompiler web IDE interface. The left pane displays a SQL script with several queries. The right pane shows the output of the queries, including departmental statistics and the results of the update and count queries.

queries.sql

```
5 -- from employees;
6
7 select d.name, avg(e.age)
8 from employees e
9 join departments d
10 on e.department_id = d.id
11 group by e.department_id;
12
13
14 select d.name, count(e.id) as total_employees
15 from employees e
16 join departments d
17 on e.department_id = d.id
18 where e.age > 40
19 group by e.department_id
20 order by count(e.id) desc
21 limit 1;
22
23 select count(*)
24 from employees
25 where joining_date >= date(now()) - interval 100 day;
26
27
28 update employees
29 set joining_date = date(now()) - interval 1 day
30 where department_id = 2;
31
32 select count(*)
33 from employees
34 where joining_date >= date(now()) - interval 100 day;
35
36 -- select *
37 -- from employees;
38
39
40 /*
41 -- Write a query to calculate the average
42 age of employees in each department.
43 -- Write a query to find the department with the highest number of employees whose name is
```

Output:

name	avg(e.age)
IT	37.5500
HR	38.4000
Finance	41.4500
Marketing	41.4000
Operations	38.5500

name	total_employees
Operations	101

count(*)
100

count(*)
280