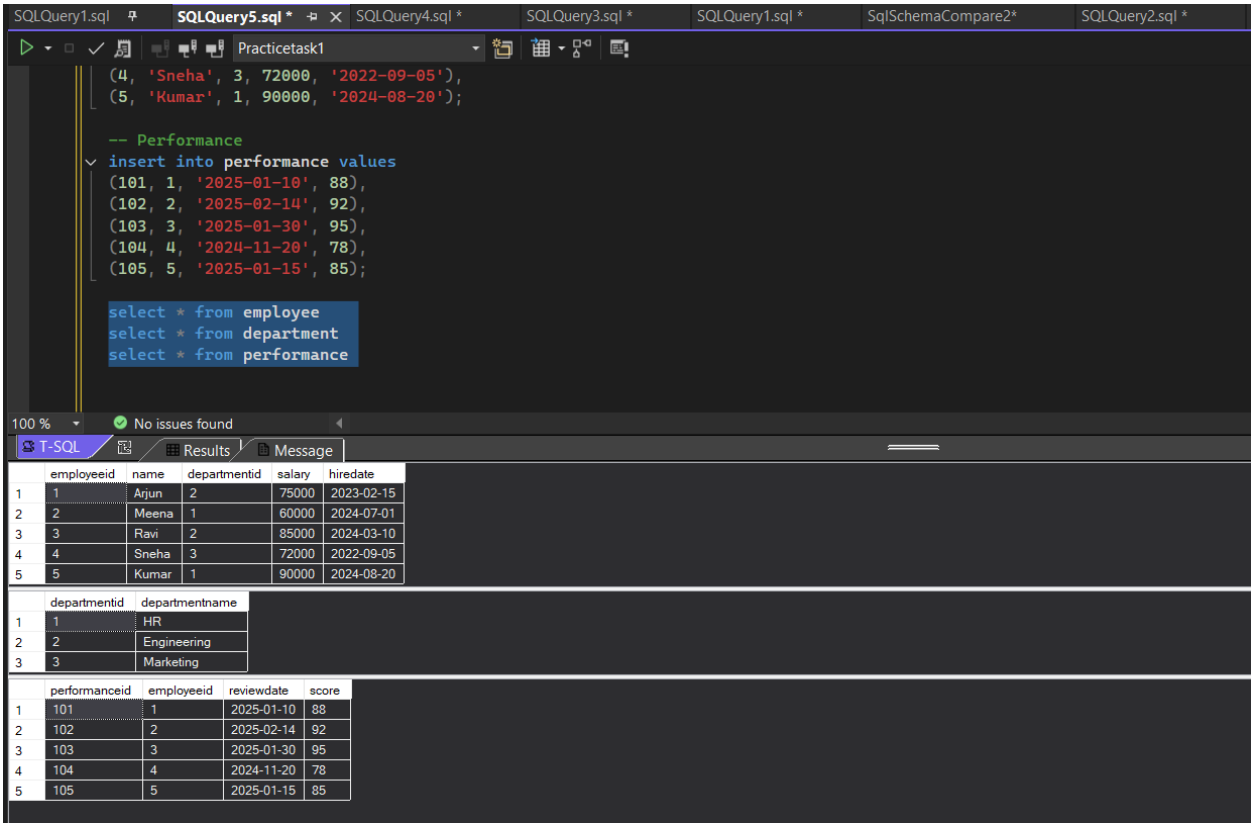
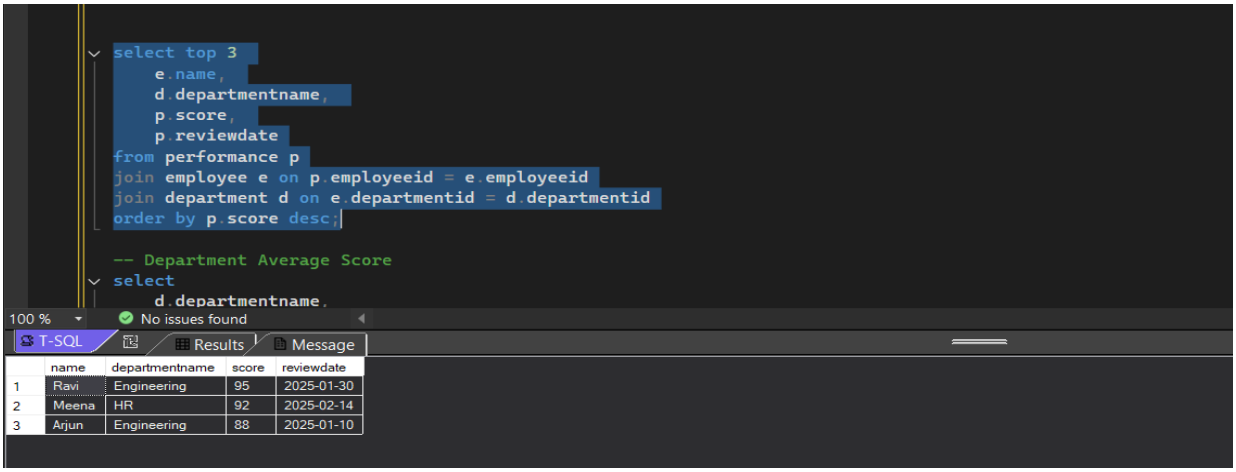
# Sql code Case study

```
-- Employee Table
create table employee (
    employeeid int primary key,
    name varchar(50),
    departmentid int,
    salary int,
    hiredate date
);
drop table employee

-- Department Table
create table department (
    departmentid int primary key,
    departmentname varchar(50)
);

-- Performance Table
create table performance (
    performanceid int primary key,
    employeeid int,
    reviewdate date,
    score int,
    foreign key (employeeid) references employee(employeeid)
);
```

```
-- Departments
insert into department values
(1, 'HR'),
(2, 'Engineering'),
(3, 'Marketing');

-- Employees
insert into employee values
(1, 'Arjun', 2, 75000, '2023-02-15'),
(2, 'Meena', 1, 60000, '2024-07-01'),
(3, 'Ravi', 2, 85000, '2024-03-10'),
(4, 'Sneha', 3, 72000, '2022-09-05'),
(5, 'Kumar', 1, 90000, '2024-08-20');

-- Performance
insert into performance values
(101, 1, '2025-01-10', 88),
(102, 2, '2025-02-14', 92),
(103, 3, '2025-01-30', 95),
(104, 4, '2024-11-20', 78),
(105, 5, '2025-01-15', 85);

select * from employee
select * from department
select * from performance
```




```
--Top 3 score
select top 3
    e.name,
    d.departmentname,
    p.score,
    p.reviewdate
from performance p
join employee e on p.employeeid = e.employeeid
join department d on e.departmentid = d.departmentid
order by p.score desc;
```




-- Department Average Score

select

d.departmentname,

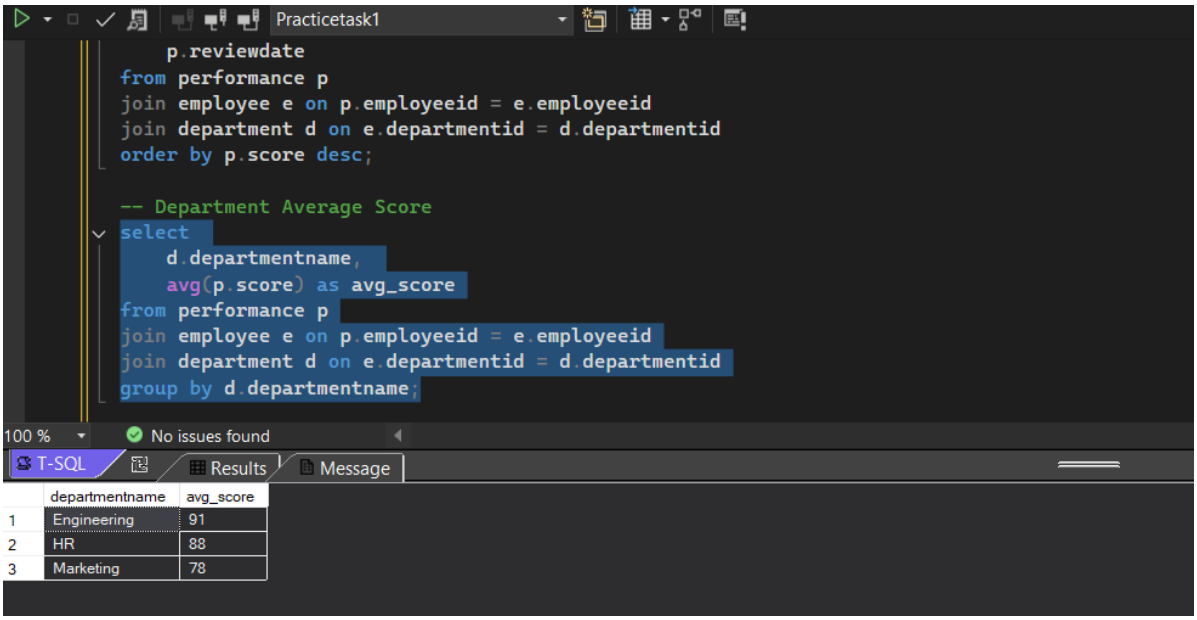
avg(p.score) as avg_score

from performance p

join employee e on p.employeeid = e.employeeid

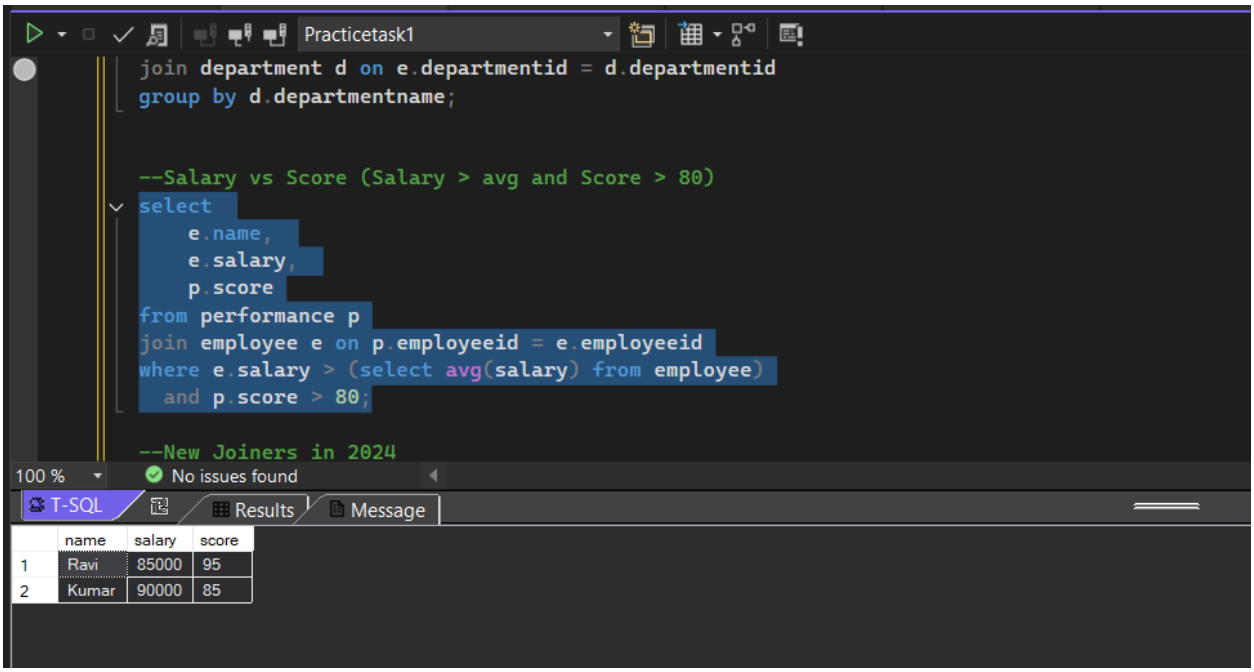
join department d on e.departmentid = d.departmentid

group by d.departmentname;



--Salary vs Score (Salary > avg and Score > 80)

```
select
   e.name,
   e.salary,
   p.score
from performance p
join employee e on p.employeeid = e.employeeid
where e.salary > (select avg(salary) from employee)
 and p.score > 80;
```




--New Joiners in 2024

```
select * from employee
where hiredate >= '2024-01-01' and hiredate <= '2024-12-31';
```

```sql
select * from employee
where hiredate >= '2024-01-01' and hiredate <= '2024-12-31';
```

100 % No issues found

T-SQL | Results | Message

| | employeeid | name | departmentid | salary | hiredate |
|---|---|---|---|---|---|
| 1 | 2 | Meena | 1 | 60000 | 2024-07-01 |
| 2 | 3 | Ravi | 2 | 85000 | 2024-03-10 |
| 3 | 5 | Kumar | 1 | 90000 | 2024-08-20 |