ASSIGNMENT-8

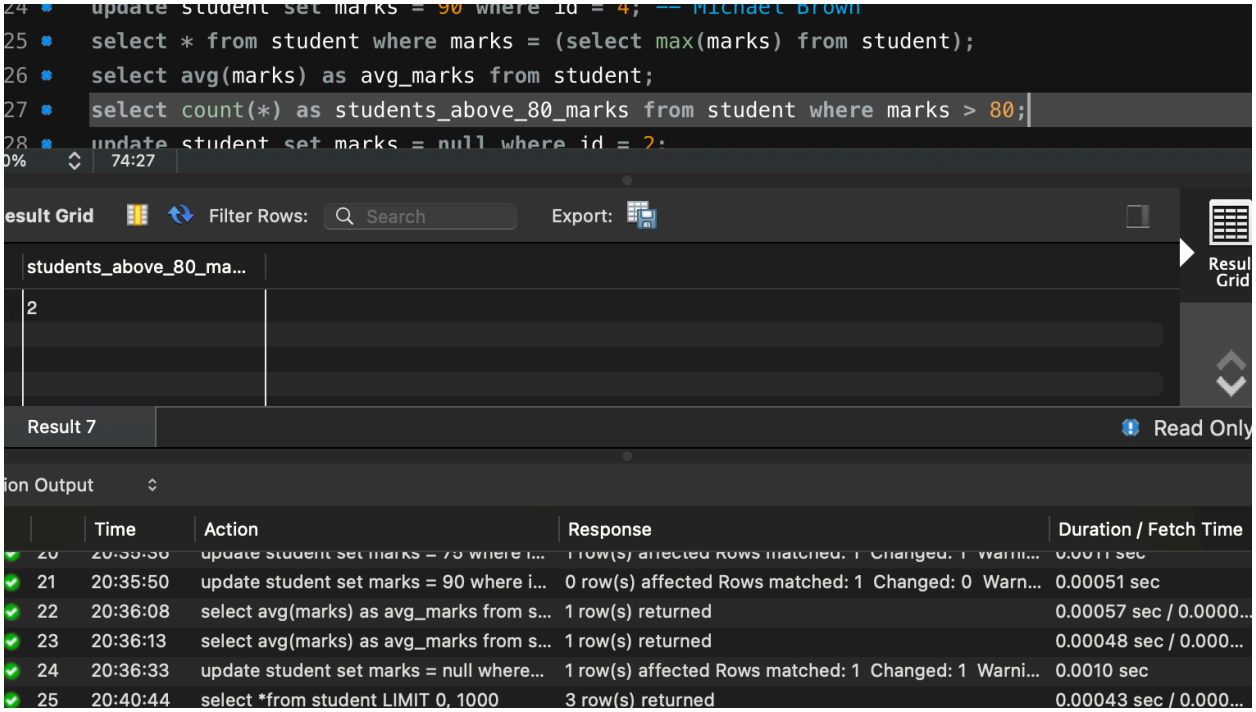
SQL QUERIES:

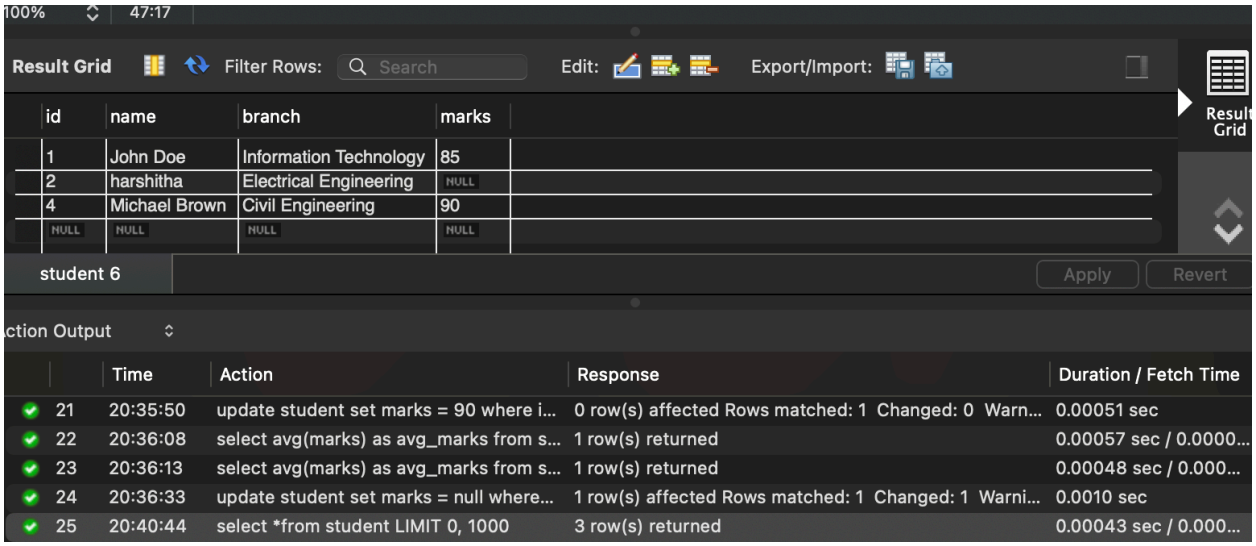
```
create database weblad;  -- creating database
create table student(    -- creating table
id int primary key,
name varchar(250),
branch varchar(250)
);
insert into  student (id, name, branch) -- inserting values into the table
values
   (1, 'John Doe', 'Computer Science'),
   (2, 'Jane Smith', 'Electrical Engineering'),
   (3, 'Alice Johnson', 'Mechanical Engineering');
select *from student;   -- retrieve data from table
update student set name="harshitha" where id=2;
delete from student where id = 3;
select avg(length(name)) as avg_name_length from student;
select count(*) as total_employees from employees;
select name, branch from student where id = 1;
insert into student (id, name, branch)
values
   (4, 'Michael Brown', 'Civil Engineering');
update student set branch = 'Information Technology' where id = 1;
alter table student add column marks int;
update student set marks = 85 where id = 1;
update student set marks = 75 where id = 2; -- Jane Smith
update student set marks = 90 where id = 4; -- Michael Brown
select * from student where marks = (select max(marks) from student);
select avg(marks) as avg_marks from student;
select count(*) as students_above_80_marks from student where marks > 80;
update student set marks = null where id = 2;
```

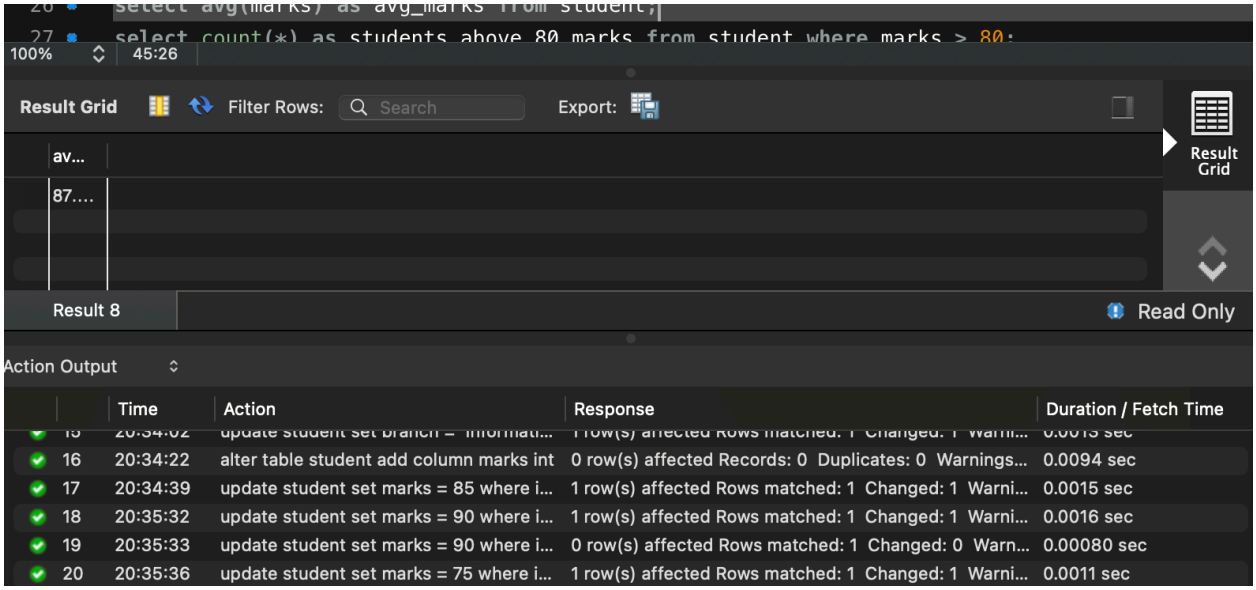
REPORT

In this SQL task, we initiated the 'weblad' database and constructed a 'student' table, recording details for three students: John Doe, Jane Smith, and Alice Johnson. Subsequently, we updated Jane Smith's name to 'harshitha' and removed Alice Johnson's record from the table. We then calculated the average length of student names and attempted to count the total number of 'employees', though no 'employees' table

was created. We retrieved the name and branch of the first student, John Doe, and introduced a new entry for Michael Brown in Civil Engineering. Following this, we updated John Doe's branch to 'Information Technology' and added a 'marks' column to track student performance. Assigning marks to each student, we identified the top scorer and computed the average marks across all students, while also tallying the count of students with marks exceeding 80. Finally, we nullified Jane Smith's marks in the system.


update student set marks = 90 where id = 4; -- Michael Brown
select * from student where marks = (select max(marks) from student);
select avg(marks) as avg_marks from student;
select count(*) as students_above_80_marks from student where marks > 80;
update student set marks = null where id = 2;
74:27
Result Grid
Filter Rows:
Search
Export:
students_above_80_ma...
2
Result 7
Read Only
Output
Time
Action
Response
Duration / Fetch Time
21 20:35:50 update student set marks = 90 where i... 0 row(s) affected Rows matched: 1 Changed: 0 Warn... 0.00051 sec
22 20:36:08 select avg(marks) as avg_marks from s... 1 row(s) returned 0.00057 sec / 0.0000...
23 20:36:13 select avg(marks) as avg_marks from s... 1 row(s) returned 0.00048 sec / 0.000...
24 20:36:33 update student set marks = null where... 1 row(s) affected Rows matched: 1 Changed: 1 Warni... 0.0010 sec
25 20:40:44 select *from student LIMIT 0, 1000 3 row(s) returned 0.00043 sec / 0.000...


47:17
Result Grid
Filter Rows:
Search
Edit:
Export/Import:
id name branch marks
1 John Doe Information Technology 85
2 harshitha Electrical Engineering NULL
4 Michael Brown Civil Engineering 90
student 6
Apply
Revert
Output
Time
Action
Response
Duration / Fetch Time
21 20:35:50 update student set marks = 90 where i... 0 row(s) affected Rows matched: 1 Changed: 0 Warn... 0.00051 sec
22 20:36:08 select avg(marks) as avg_marks from s... 1 row(s) returned 0.00057 sec / 0.0000...
23 20:36:13 select avg(marks) as avg_marks from s... 1 row(s) returned 0.00048 sec / 0.000...
24 20:36:33 update student set marks = null where... 1 row(s) affected Rows matched: 1 Changed: 1 Warni... 0.0010 sec
25 20:40:44 select *from student LIMIT 0, 1000 3 row(s) returned 0.00043 sec / 0.000...


select avg(marks) as avg_marks from student;
select count(*) as students_above_80_marks from student where marks > 80;
100%
45:26
Result Grid
Filter Rows:
Search
Export:
av...
87....
Result Grid
Result 8
Read Only
Action Output
Time
Action
Response
Duration / Fetch Time
16 20:34:22 alter table student add column marks int 0 row(s) affected Records: 0 Duplicates: 0 Warnings... 0.0094 sec
17 20:34:39 update student set marks = 85 where i... 1 row(s) affected Rows matched: 1 Changed: 1 Warni... 0.0015 sec
18 20:35:32 update student set marks = 90 where i... 1 row(s) affected Rows matched: 1 Changed: 1 Warni... 0.0016 sec
19 20:35:33 update student set marks = 90 where i... 0 row(s) affected Rows matched: 1 Changed: 0 Warn... 0.00080 sec
20 20:35:36 update student set marks = 75 where i... 1 row(s) affected Rows matched: 1 Changed: 1 Warni... 0.0011 sec