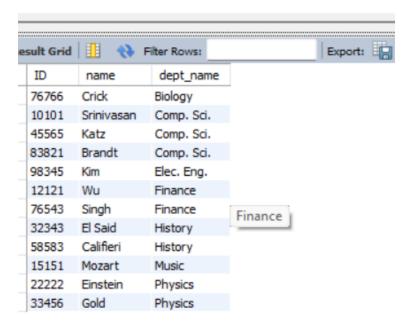# SQL Query Report(Lab 6)

```
-- task 1
CREATE VIEW Advisor_Selection AS
SELECT Instructor.ID, Instructor.name, Department.dept_name
FROM Instructor
JOIN Department ON Instructor.dept_name = Department.dept_name;
```

```
1 •    select * from Advisor_Selection;
```

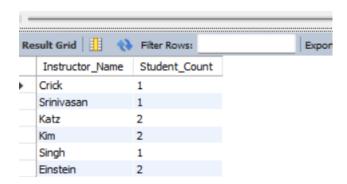| ID	name	dept_name
76766	Crick	Biology
10101	Srinivasan	Comp. Sci.
45565	Katz	Comp. Sci.
83821	Brandt	Comp. Sci.
98345	Kim	Elec. Eng.
12121	Wu	Finance
76543	Singh	Finance
32343	El Said	History
58583	Califieri	History
15151	Mozart	Music
22222	Einstein	Physics
33456	Gold	Physics

```
-- task 2
CREATE VIEW Student_Count AS
SELECT Advisor_Selection.name AS Instructor_Name, COUNT(Advisor.s_ID) AS Student_Count
FROM Advisor_Selection
JOIN Advisor ON Advisor_Selection.ID = Advisor.i_ID
GROUP BY Advisor_Selection.name;
```

```
1 •    select * from Student_Count;
```

Result Grid | Filter Rows: | Expor

Instructor_Name	Student_Count
Crick	1
Srinivasan	1
Katz	2
Kim	2
Singh	1
Einstein	2

```sql
-- task 3
-- Create roles
CREATE ROLE Student;
CREATE ROLE CourseTeacher;
CREATE ROLE HeadOfDepartment;
CREATE ROLE Administrator;

-- Students can view advisor and course information
GRANT SELECT ON Advisor TO Student;
GRANT SELECT ON Course TO Student;

-- Course Teachers can view student and course information
GRANT SELECT ON Student TO CourseTeacher;
GRANT SELECT ON Course TO CourseTeacher;

-- Heads of Departments inherit Course Teacher privileges
-- and can add instructors
GRANT CourseTeacher TO HeadOfDepartment;
GRANT INSERT ON Instructor TO HeadOfDepartment;

-- Administrators can view department
-- and instructor information
-- and update 'department budgets'
GRANT SELECT ON Department TO Administrator;
GRANT SELECT ON Instructor TO Administrator;
GRANT UPDATE(budget) ON Department TO Administrator;
```

```sql
-- task 4
CREATE USER 'student_user' IDENTIFIED BY 'pias46';
CREATE USER 'teacher_user' IDENTIFIED BY 'pias46';
CREATE USER 'hod_user' IDENTIFIED BY 'pias46';
CREATE USER 'admin_user' IDENTIFIED BY 'pias46';

GRANT Student TO 'student_user';
GRANT CourseTeacher TO 'teacher_user';
GRANT HeadOfDepartment TO 'hod_user';
GRANT Administrator TO 'admin_user';
```