# Home Work 2 - SQL

# Home Work Tables

**Depts**

| dcode | Dname |
|-------|-------|
| ICS | Info. & Comp. Sci. |
| COE | Comp. Eng. |
| SWE | Software Eng. |

**Subjects**

| Scode | Sname | Dcode |
|-------|-------|-------|
| ICS202 | DS | ICS |
| ICS334 | DB | ICS |
| COE241 | MP | COE |
| SWE444 | SW design | SWE |
| SWE212 | GUI | SWE |
| ICS431 | OS | ICS |

**Can_teach**

| LID | Scode |
|-----|-------|
| 111 | ICS202 |
| 222 | ICS334 |
| 333 | ICS202 |
| 444 | ICS431 |
| 333 | ICS334 |
| 111 | COE241 |
| 222 | SWE444 |
| 222 | ICS202 |
| 333 | ICS431 |

**Lecturers**

| LID | Lname | Ldcode | Lsalary |
|-----|-------|--------|---------|
| 111 | Ali | COE | 2000 |
| 222 | Sami | SWE | 2100 |
| 333 | Adel | ICS | 1900 |
| 444 | Sami | COE | 2000 |
| 555 | Yasser | ICS | 1500 |

# Using SQL answer the following questions.

1. Retrieve the names of the lecturers whose salary is greater than 1600.
2. Retrieve the IDs of the lecturers who do not teach any courses.
3. Retrieve the IDs and names of the lecturers who teach all ICS courses.
4. Retrieve the names of the lecturers who get the highest salary.
5. Find the average salary of all the lecturers.
6. Retrieve the IDs and Names of the lecturers who do not teach any course.
7. Retrieve the courses that are taught by more than one lecturer.
8. Rename the table **depts** to departments.
9. Rename the column dname to department_name.
10. Find the average salary of the lecturers in each department
11. Retrieve all the courses that can not be taught by any lecturer.
12. Retrieve the names of all courses (even those that can not be taught by any lecturer) and the names of all the lecturers who can teach them.