

RDBMS Assignment 2

24 October 2022, due 31 October 2022

The zip file supplied with this assignment has 6 csv files pertaining to courses and grades at Hogwarts.

- **students.csv** : information about students
- **instructors.csv** : information about instructors
- **courses.csv** : information about courses and instructors
- **grades.csv** : information about enrolment and grades
- **grade point.csv** : mapping from grades to grade points
- **houses.csv** : information about Hogwarts houses, first three letters of roll number denote house code

Read these csv files in as tables into an SQL database and write queries to compute the following.

1. Course name(s) with highest enrolment: (course name, number of students enrolled)
2. Student(s) enrolled for maximum number of courses: (student name, number of courses enrolled)
3. Student(s) with maximum number of distinct grades across courses: (student name, number of courses)
4. GPA of each course: (course name, GPA)
5. GPA of each student: (student name, GPA)
6. Most generous teacher(s) – highest mean GPA in course: (teacher name, course name)
7. Student(s) with overall highest GPA: (student name, GPA)
8. Student(s) with highest GPA in each house: (student name, house name, GPA)
9. Mean GPA of students in each house: (house name, GPA)
10. Students in Slytherin with GPA higher than mean GPA in Slytherin: (student name)
11. Students in Hufflepuff with GPA higher than mean GPA in Gryffindor: (student name)

You should be able to record your SQL session in a text file. For instance, in *MySQL*, you can save the entire session to a file **mysession.txt** by using the following command.

```
mysql --tee=mysession.txt
```

Submit a text file recording all your queries and their responses.