QUERY:

GROUP BY

1. Contare quanti iscritti ci sono stati ogni anno:
```sql
SELECT year(enrolment_date) ,COUNT(*)
FROM students
GROUP BY year(enrolment_date)
```

2. Contare gli insegnanti che hanno l'ufficio nello stesso edificio:
```sql
SELECT office_address, COUNT(*)
FROM teachers
GROUP BY office_address
```

3. Calcolare la media dei voti di ogni appello d'esame:
```sql
SELECT exam_id, AVG(vote)
FROM exam_student
GROUP BY exam_id
```

4. Contare quanti corsi di laurea ci sono per ogni dipartimento:
```sql
SELECT department_id, COUNT(*)
FROM degrees
GROUP by department_id
```

JOIN

1. Selezionare tutti gli studenti iscritti al Corso di Laurea in Economia:
```sql
SELECT *
FROM students
  JOIN degrees
  ON students.degree_id = degrees.id
WHERE degrees.name LIKE "Corso di Laurea in Economia"
```

2. Selezionare tutti i Corsi di Laurea del Dipartimento di

Neuroscienze:
```sql
SELECT departments.name ,degrees.name
FROM departments
  JOIN degrees
  ON departments.id = degrees.department_id
WHERE departments.name LIKE "Dipartimento di
Neuroscienze"
```

3. Selezionare tutti i corsi in cui insegna Fulvio Amato (id=44):
```sql
SELECT courses.*
FROM courses
  JOIN course_teacher
  ON courses.id = course_teacher.course_id
  JOIN teachers
  ON course_teacher.teacher_id = teachers.id
WHERE teachers.name = "fulvio" AND teachers.surname = "am
ato"
```

4. Selezionare tutti gli studenti con relativo corso di laurea e relativo dipartimento, in ordine alfabetico per cognome e nome:
```sql
SELECT *
FROM students
  JOIN degrees
  ON students.degree_id = degrees.id
  JOIN departments
  ON degrees.department_id = departments.id
ORDER BY students.surname, students.name
```

5. Selezionare tutti i corsi di laurea con i relativi corsi e insegnanti:
```sql
SELECT degrees.*, courses.*, teachers.*
FROM degrees
  JOIN courses
  ON degrees.id = courses.degree_id
  JOIN course_teacher
```

```sql
  ON courses.id = course_teacher.course_id
  JOIN teachers
  ON course_teacher.teacher_id = teachers.id
ORDER BY degrees.name
```

6. Selezionare tutti i docenti che insegnano nel Dipartimento di Matematica (54):

```sql
SELECT teachers.name, teachers.surname, departments.name
  FROM teachers
  JOIN course_teacher
  ON teachers.id = course_teacher.teacher_id
  JOIN courses
  ON courses.id = course_teacher.course_id
  JOIN degrees
  ON degrees.id = courses.degree_id
  JOIN departments
ON departments.id = degrees.department_id
WHERE departments.name LIKE "Dipartimento di Matematica"
```