### 1. Selezionare tutti gli studenti iscritti al Corso di Laurea in Economia

```
SELECT `students`.`name` AS `nome_studente`, `students`.`surname` AS `cognome_studente`

FROM `students`

INNER JOIN `degrees` ON `students`.`degree_id` = `degrees`.`id`

WHERE `degrees`.`name` = "Corso di Laurea in Economia";
```

# 2. Selezionare tutti i Corsi di Laurea Magistrale del Dipartimento di

#### Neuroscienze

```
SELECT *
```

FROM `degrees`

INNER JOIN `departments` ON `departments`.`id` = `degrees`.`department\_id`

WHERE `degrees`.`level` = "Magistrale"

AND `departments`.`name` = "Dipartimento di Neuroscienze";

# 3. Selezionare tutti i corsi in cui insegna Fulvio Amato (id=44)

```
SELECT `courses`.`id`, `courses`.`name` AS `nome_corso`, `teachers`.`name` AS `nome_insegnante`, `teachers`.`surname` AS `cognome_insegnante`

FROM `courses`

INNER JOIN `course_teacher` ON `courses`.`id` = `course_teacher`.`course_id`

INNER JOIN `teachers` ON `teachers`.`id` = `course_teacher`.`teacher_id`

WHERE `teachers`.`name` = "Fulvio"

AND `teachers`.`surname` = "Amato";
```

# 4. Selezionare tutti gli studenti con i dati relativi al corso di laurea a cui sono iscritti e il relativo dipartimento, in ordine alfabetico per cognome e

#### nome

```
SELECT DISTINCT `students`.`name` AS `nome`, `students`.`surname` AS `cognome`, `degrees`.`name` AS `corso_laurea`, `departments`.`name` AS `dipartimento`

FROM `students`

INNER JOIN `degrees` ON `degrees`.`id` = `students`.`degree_id`
```

```
INNER JOIN `departments` ON `departments`.`id` = `degrees`.`department_id`
ORDER BY `students`.`surname`, `students`.`name`;
```

# 5. Selezionare tutti i corsi di laurea con i relativi corsi e insegnanti

```
SELECT `degrees`.`name` AS `corso_di_laurea`, `courses`.`name` AS `corsi`, `teachers`.`name` AS `nome_insegnante`, `teachers`.`surname` AS `cognome_insegnante`
FROM `degrees`
INNER JOIN `courses` ON `courses`.`degree_id` = `degrees`.`id`
INNER JOIN `course_teacher` ON `course_teacher`.`course_id` = `courses`.`id`
INNER JOIN `teachers` ON `teachers`.`id` = `course_teacher`.`teacher_id`
ORDER BY `corso_di_laurea`;
```

# 6. Selezionare tutti i docenti che insegnano nel Dipartimento di

# Matematica (54)

SELECT DISTINCT `teachers`.`name` AS `nome\_insegnante`, `teachers`.`surname` AS `cognome\_insegnante`, `departments`.`name` AS `dipartimento`

FROM `teachers`

INNER JOIN `course\_teacher` ON `course\_teacher`.`teacher\_id` = `teachers`.`id`

INNER JOIN `courses` ON `courses`.`id` = `course\_teacher`.`course\_id`

INNER JOIN `degrees` ON `degrees`.`id` = `courses`.`degree\_id`

INNER JOIN `departments` ON `departments`.`id` = `degrees`.`department\_id`

# 7. BONUS: Selezionare per ogni studente il numero di tentativi sostenuti per ogni esame, stampando anche il voto massimo. Successivamente, filtrare i tentativi con voto minimo 18.

WHERE `departments`.`name` = "Dipartimento di Matematica"

```
SELECT `students`.`name`, `students`.`surname`, `exams`.`id` AS `esame`, COUNT(`exam_student`.`exam_id`) AS `tentativi`, MAX(`exam_student`.`vote`) AS `voto_massimo`
```

FROM `students`

INNER JOIN `exam\_student` ON `exam\_student`.`student\_id` = `students`.`id`

```
INNER JOIN `exams` ON `exams`.`id` = `exam_student`.`exam_id`
GROUP BY `students`.`id`, `exams`.`id`;
```

SELECT `students`.`name`, `students`.`surname`, `exams`.`id` AS `esame`, COUNT(`exam\_student`.`exam\_id`) AS `tentativi`, MIN(`exam\_student`.`vote`) AS `voto\_minimo`

FROM `students`

INNER JOIN `exam\_student` ON `exam\_student`.`student\_id` = `students`.`id`

INNER JOIN `exams` ON `exams`.`id` = `exam\_student`.`exam\_id`

GROUP BY `students`.`id`, `exams`.`id`

HAVING `voto\_minimo` = 18