

#1

```
SELECT
    *
FROM
    `student`
WHERE
    (`LastName` = 'Ben')
ORDER BY `gender` , `age`;
```

#2

```
SELECT
    `StudentID`, `LastName`, `FirstName`
FROM
    `student`
WHERE
    `StudentID` IN (SELECT
        `StudentID`
        FROM
            `enrollment`
        WHERE
            `Grade` = 'F');
```

#3

```
SELECT
    `StudentID`, `LastName`, `FirstName`
FROM
    `student`
WHERE
    `StudentID` IN (SELECT
        `StudentID`
        FROM
            `enrollment`
        WHERE
            `Grade` IN ('F' , 'D'));
```

#4

```
SELECT
    `StudentID`, `LastName`, `FirstName`
FROM
    `student`
WHERE
    `StudentID` IN (SELECT
        `StudentID`
        FROM
```

```
        `enrollment`
WHERE
    `InstructorID` = (SELECT
        `InstructorID`
    FROM
        `instructor`
    WHERE
        `LastName` = 'John'
        && `FirstName` = 'Chua'))
ORDER BY `LastName`;
```

#5

```
SELECT
    COUNT(*) AS `amt_section_john`
FROM
    `section`
WHERE
    `InstructorID` = (SELECT
        `InstructorID`
    FROM
        `instructor`
    WHERE
        `LastName` = 'John'
        AND `FirstName` = 'Chua')
    AND `Sem` = 2
    AND `Year` = 2018;
```

#6

```
SELECT
    COUNT(*) AS `amt_student`
FROM
    `enrollment`
WHERE
    `CourseID` = 8881
    AND `InstructorID` = (SELECT
        `InstructorID`
    FROM
        `instructor`
    WHERE
        `LastName` = 'Kris'
        AND `FirstName` = 'Tan')
    AND `Sem` = 1
    AND `Year` = 2018;
```

#7

```
SELECT
    *
FROM
    `student`
WHERE
    (SELECT
        COUNT(*)
    FROM
        `enrollment`
    WHERE
        `StudentID` = `student`.`StudentID`
        AND `Year` IN (2017 , 2018)) >= 3;
```

#8

```
SELECT
    *
FROM
    `instructor`
WHERE
    `InstructorID` IN (SELECT
        `InstructorID`
    FROM
        `section`
    WHERE
        `Sem` = 2 AND `Year` IN (2018)
    GROUP BY `InstructorID`
    HAVING COUNT(`SectionID`) >= 3);
```

#9

```
SELECT
    *
FROM
    `student`
WHERE
    `StudentID` IN (SELECT
        `StudentID`
    FROM
        `enrollment`
    WHERE
        `Grade` = 'A'
        AND `Year` IN (2017 , 2018)
    GROUP BY `StudentID`
    HAVING COUNT(`Grade`) >= 3);
```

#10

```
INSERT INTO `course` VALUES (8887, "Advanced Database Development", 4);
```

#11

```
UPDATE `instructor` SET `LastName` = "WuShin" WHERE `InstructorID` = 5507;
```

#12

```
set SQL_SAFE_UPDATES = 0;
UPDATE `course` SET `CourseID` = 8887 WHERE `CourseName` = "Advanced Database
Development";
set SQL_SAFE_UPDATES = 1;
SELECT
    *
FROM
    `section`;
```

#13

```
set SQL_SAFE_UPDATES = 0;
UPDATE `course` SET `CourseID` = 9887 WHERE `CourseName` = "Advanced Database
Development";
set SQL_SAFE_UPDATES = 1;
SELECT
    *
FROM
    `course`;
```

#14

```
SELECT
    *
FROM
    `enrollment`;

SELECT
    `StudentID`
FROM
    `enrollment`
WHERE
    `InstructorID` = (SELECT
        `InstructorID`
        FROM
            `instructor`
        WHERE
            `LastName` = 'John'
```

```
&& `FirstName` = 'Chua');
```

```
UPDATE `enrollment`  
SET  
  `Grade` = 'A'  
WHERE  
  `InstructorID` = (SELECT  
    `InstructorID`  
  FROM  
    `instructor`  
  WHERE  
    `LastName` = 'John'  
    AND `FirstName` = 'Chua');
```

```
SELECT  
  *  
FROM  
  `enrollment`;
```

```
#15  
SELECT  
  *  
FROM  
  `student`  
WHERE  
  `StudentID` NOT IN (SELECT  
    `StudentID`  
  FROM  
    `enrollment`  
  WHERE  
    `Sem` = 2 AND `Year` = 2018);
```

```
#16  
SELECT  
  *  
FROM  
  `instructor`  
WHERE  
  `InstructorID` NOT IN (SELECT  
    `InstructorID`  
  FROM  
    `enrollment`);
```

```
#17
```

```
SELECT
    I.InstructorID,
    I.LastName,
    I.FirstName,
    COUNT(CourseID) AS `course_taught`
FROM
    `instructor` AS I
    LEFT JOIN
    `section` AS S ON I.InstructorID = S.InstructorID
GROUP BY I.InstructorID
ORDER BY `course_taught` DESC;
```