EE477 HW0

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Task 1

(1) CREATE DATABASE coursys;

USE coursys;

(2) CREATE TABLE grades(

studentid INT REFERENCES students(id),

course CHAR(10),

mark DOUBLE PRECISION,

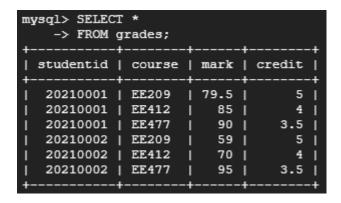
credit DOUBLE PRECISION,

PRIMARY KEY (studentid, course));

INSERT INTO grades(studentid, course, mark, credit) VALUES

(20210001, 'EE477', 90, 3.5), (20210001, 'EE412', 85, 4), (20210001, 'EE209', 79.5, 5),

(20210002, 'EE477', 95, 3.5), (20210002, 'EE209', 59, 5), (20210002, 'EE412', 70, 4);



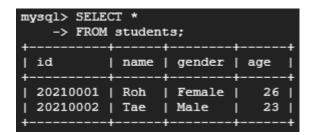
(3) CREATE TABLE students(id INT PRIMARY KEY, name VARCHAR(30) DEFAULT ",

age INT);

gender CHAR(6),

INSERT INTO students(id, name, gender, age) VALUES

(20210001, 'Roh', 'Female', 26), (20210002, 'Tae', 'Male', 23);



Task 2

(1) SELECT *

FROM grades;

```
mysql> SELECT *
    -> FROM grades;
  studentid | course | mark | credit
                                     5 J
   20210001 | EE209
                        79.5 |
   20210001 | EE412
                          85
                                     4
   20210001 | EE477
                                   3.5
                          90
                          59
   20210002 |
              EE209
                                     5
   20210002
              EE412
                          70
                                     4
   20210002 |
              EE477
                          95
                                   3.5
```

(2) SELECT *

FROM grades

WHERE course = 'EE477';

```
mysql> SELECT *
    -> FROM grades
    -> WHERE course = 'EE477';
+-----+
| studentid | course | mark | credit |
+-----+
| 20210001 | EE477 | 90 | 3.5 |
| 20210002 | EE477 | 95 | 3.5 |
+-----+
```

(3) SELECT *

FROM grades

WHERE mark > 60 AND credit >= 4;

```
mysql> SELECT *
    -> FROM grades
    -> WHERE mark > 60 AND credit >= 4;
+-----+
| studentid | course | mark | credit |
+-----+
| 20210001 | EE209 | 79.5 | 5 |
| 20210001 | EE412 | 85 | 4 |
| 20210002 | EE412 | 70 | 4 |
+------+
```

(4) SELECT *

FROM grades

WHERE course LIKE 'EE4%';

```
mysql> SELECT *
    -> FROM grades
    -> WHERE course LIKE 'EE4%';
| studentid | course | mark | credit |
   20210001 | EE412 |
                         85 J
                                   4 |
   20210001 | EE477 |
                         90 I
                                 3.5 |
   20210002 | EE412 |
                         70 I
                                  4 |
   20210002 | EE477 |
                         95 J
                                 3.5
```

(5) SELECT studentid, course, mark

FROM grades;

(6) SELECT DISTINCT course

FROM grades;

```
mysql> SELECT DISTINCT course
-> FROM grades;
+-----+
| course |
+-----+
| EE209 |
| EE412 |
| EE477 |
+-----+
```

(7) SELECT studentid, course, mark * credit AS markpoint

FROM grades;

(8) SELECT name, mark

FROM grades, students

WHERE course = 'EE477' AND studentid = id;

```
mysql> SELECT name, mark
    -> FROM grades, students
    -> WHERE course = 'EE477' AND studentid = id;
+----+
| name | mark |
+----+
| Roh | 90 |
| Tae | 95 |
+----+
```

(9) SELECT studentid, course,

CASE

WHEN mark >= 90 THEN 'A'

WHEN mark >= 80 AND mark < 90 THEN 'B'

WHEN mark >= 70 AND mark < 80 THEN 'C'

WHEN mark >= 60 AND mark < 70 THEN 'D'

WHEN mark < 60 THEN 'F'

END AS lettergrade

FROM grades;

```
mysql> SELECT studentid, course,
    -> CASE
    -> WHEN mark >= 90 THEN 'A'
    -> WHEN mark >= 80 AND mark < 90 THEN 'B'
    -> WHEN mark >= 70 AND mark < 80 THEN 'C'
    -> WHEN mark >= 60 AND mark < 70 THEN 'D'
    -> WHEN mark < 60 THEN 'F'
    -> END AS lettergrade
    -> FROM grades;
 studentid | course | lettergrade |
   20210001 | EE209
                    | B
   20210001 | EE412
   20210001 | EE477
                     | F
   20210002 | EE209
                     | C
   20210002 | EE412
   20210002 | EE477
```