

SIT103 Database

Tutorial Exercise 6 Answers

EXERCISE A:

```
SELECT SURNAME || ', ' || GIVEN AS FULLNAME, DOB
FROM STUDENT
WHERE DOB = (SELECT MAX(DOB) FROM STUDENT)
UNION
SELECT SURNAME || ', ' || GIVEN AS FULLNAME, DOB
FROM STUDENT
WHERE DOB = (SELECT MIN(DOB) FROM STUDENT);
```

EXERCISE B:

```
SELECT STUDENT_NO, COUNT(*)
FROM STUDENT_COURSE
WHERE SEM_START = 1
GROUP BY STUDENT_NO
HAVING COUNT(*) = 1;
```

EXERCISE C:

```
SELECT SURNAME || ', ' || GIVEN
FROM STUDENT
WHERE STUDENT_NO NOT IN (SELECT DISTINCT STUDENT_NO
                        FROM STUDENT_COURSE);
```

EXERCISE D:

```
SELECT COURSE_NAME
FROM COURSE
WHERE COURSE_CODE NOT IN (SELECT DISTINCT COURSE_CODE
                        FROM STUDENT_COURSE);
```

EXERCISE EA:

```
SELECT SURNAME, GIVEN, DOB, SEX
FROM STUDENT
WHERE 11 < (SELECT COUNT(*)
           FROM STUDENT_COURSE
           WHERE STUDENT_COURSE.STUDENT_NO = STUDENT.STUDENT_NO);
```

EXERCISE EB:

```
SELECT SURNAME, GIVEN, DOB, SEX
FROM STUDENT, STUDENT_COURSE
WHERE STUDENT_COURSE.STUDENT_NO = STUDENT.STUDENT_NO
GROUP BY STUDENT.STUDENT_NO, SURNAME, GIVEN, DOB, SEX
HAVING COUNT(*) > 11;
```

EXERCISE FA:

```
SELECT COURSE_CODE, COURSE_NAME
FROM COURSE
WHERE DEPT_NO = 165
AND 16 < (SELECT COUNT(*)
         FROM STUDENT_COURSE
         WHERE STUDENT_COURSE.COURSE_CODE = COURSE.COURSE_CODE);
```

EXERCISE FB:

```
SELECT COURSE.COURSE_CODE, COURSE_NAME
FROM COURSE, STUDENT_COURSE
WHERE STUDENT_COURSE.COURSE_CODE = COURSE.COURSE_CODE
AND DEPT_NO = 165
GROUP BY COURSE.COURSE_CODE, COURSE_NAME
HAVING COUNT(*) > 16;
```