CSCI3170 Short Assignment #1

(Deadline: Oct 20 23:59)

Name: Pass / Fail

Student ID:

Consider the following relation schema and SQL statement:

Course(course_id, course_name, stream)
Enrollment(course_id, student_id)


```
SELECT student_id
FROM Enrollment E
WHERE E.course_id  IN (
                SELECT C.course_id
                FROM Course C
                WHERE C.stream = A
             )
GROUP BY student_id
HAVING COUNT(*) = (
                SELECT COUNT (*)
                FROM Course C2
                WHERE C2.stream = A
           );
```


1. Suppose we have the following relation instance. What is the output of the query?

course_id	course_name	stream
CSCI3170	Database	A
CSCI1234	Information	A
CSCI4430	Network	B

course_id	student_id
CSCI3170	1
CSCI1234	1
CSCI3170	2
CSCI4430	2
CSCI3170	3
CSCI4430	3
CSCI1234	3

2. Use ONE sentence to describe the purpose of the SQL statement.

3. Rewrite the SQL statement in Relational Algebra
   (Hint: Use division)