

Question 2

40 pts

Consider the relational schema below:

```
Students(sid: integer, sname: string, major: string)
Courses(cid: string, cname: string)
Enrollment(sid: integer, cid: string, grade: real)
```

Write a **tuple relational calculus expression** that satisfies this query?

- Find the distinct names of all students who major in either "Math" or "Economics" who score less than 60% in either course 91.574 or in course 14.501 (using cid).

Submit your answer as a file attachment. You may write the answer in pencil and take a picture and submit that picture.

Be sure to put your name into your submission file.

Name: Jinwei Zhang

Answer:

$$\left\{ s.sname \mid Students(s) \wedge Enrollment(e) \wedge s.sid = e.sid \wedge (s.major = 'Math' \vee s.major = 'Economics') \wedge (e.cid = '91.574' \vee e.cid = '14.501') \wedge e.grade < 60 \right\}$$