

EECS 2032E

Lab 4 Fall 2021

In this lab you will use bash to manipulate simple database files. In the second case an introduction to C programming The lab should be submitted as **submit 2032E LAB4 file_name**

Problem 1

Given two CSV files as follows:

names.txt contains three fields, last name, first name, and student ID (alphanumeric) arranged in alphabetical order by last name.

Courses.txt The file contains three fields, ID, course name, and grade

~~or example~~

~~Smith, John 123456 EECS2032 A
Smith, John 123456 EECS2021 B~~

names.txt

Smith, John, 123456
Doe, Jane, 234567

Courses.txt

123456,EECS2032,A
123456,EECS2021,B
234567,EECS2021,B

Write a shell script to do the following

The script runs as lab4_1.sh followed by some flag and data, depending on the value of the flag

-m means merge the two files into one with the following format

Last name, first name, ID, course grade. The first two fields (last and first name) are separated by a comma, then the rest are separated by a tab

for example, the output of the previous example should be

Smith, John 123456 A
Smith, John 123456 B
Doe, Jane 23456

and so on. Of course the second file may contains repeated ID's since a student can take more than one course.

-s followed by student ID. If the ID does not exist it display

No such ID

Otherwise, it display

Student name followed by his/her GPA. Last and first name separated by a comma, then a tab, ~~the GPA with two decimal places~~

The GPA is on a 0-4 scale (A=4, B=3, C=2, D=1, F=0)

For example

```
lab4_1.sh -s 123456  
Smith, John      3.5
```

submit as lab4_1.sh