EECS 2032

Lab 3
Fall 2019

In this lab, you will write a small shell script to perform some calculations using conditional statements and to manipulate a string. The lab should be submitted as

Problem 1

Write a shell script that reads one number (no prompt, just read)
If the number read could be the hypotenuse of a right angled triangle where the legs have integer values, it prints YES followed by a new line; else it prints NO followed by a new line;
Basically we are looking for the value read (x) to be
$x^2 = i^2 + j^2$ ∃ i, j such that $0 < i, j < x$ and i, j are integers

Submit the file as **lab3_1.sh** to **LAB3** directory

Problem 2

Write a shell script lab3_2.sh (make it executable).

Your script runs as

my_prompt$lab3_2.sh   file1   file2 student_ID
where file1 is contains data on he form
first_name last_name Student_ID
Separated by spaces.
File2 contains data on the form
Student_ID   course_name   optional_grade
ID is a student ID

Specifications

1. If either file1 or file2 don't exist, it echoes "files do not exist" without the quotes. Note that by saying echo, that implies new line termination
2. The script checks the two files, basically displaying the result according to the following rules
3. If the ID is not in file1, it echoes "No such ID" again without the quotes
4. If file2 does not contain a grade for that ID, it should display (echoes)

firstname lastname has no grade in course xxxx (all words separated by one space), where firstname is the student first name with the given ID, last name is the student last name, xxxx is the course with no grade for it in the file

5. If file 2 contains a grade, it should echoes firstname lastname has a grade of g in course xxxx (I think this is clear, look at the example in and out files.

6. Submit the file as ~~lab3_1.sh~~ should be **lab3_2.sh** to **LAB3** directory