EECS 2031 - Lab 3

**Description**

Assume there is a path or its subdirectories which contains student records regarding to different courses. These files have “.rec” extension. Each file belongs to a course and has the following format:

COURSE NAME: <the name of the course>

CREDITS:  <credits>

Student#       <a list of numbers belong to different activities have been done in the course>

For example a course record file can be like this:

COURSE NAME: Operating Systems

CREDITS:  4

123456       1 1 0 1 1 0 1 0 0 0 1 5 8 0 12 10 25

243567       0 1 1 0 1 1 0 1 0 0 0 7 9 12 15 17 15

There is a single or multiple SPACE characters separating each token in each line. You can download an example of such a file [here](https://www.eecs.yorku.ca/course_archive/2019-20/F/2031A/Labs/Lab3/example.txt).

Your task for this lab exercise, is to create a shell script that works with such files (see the Requirements section below).

What to do

* Create a shell script called lab3.sh in your favorite editor so that it implements the functionality described in the Requirements section below.
* Test that your shell script correctly implements the required functionality.
* Submit your solution electronically *before* midnight on Tuesday using the command
* submit 2031 Lab3 lab3.sh
* You may submit your solution more than once. Additional documentation about the submit command can be viewed by typing man submit.

General Requirements

* Your script should be run under Born Shell.
* Enter your first name + last name + student number as a comment at the top of the script.
* Enter comments for all parts of your script to explain the functionality of the code.
* Only use covered commands in lectures.
* In case of normal exit return 0, otherwise return 1

Specific Requirements

Your script will receive one argument which indicates the path where are all "\*.rec" placed. Note that those file might be under sub-folder of the specified path. You also must consider only readable files.

If the path is not specified, the script shows an appropriate error and exits. See the sample run for more detail about error.

If there is no readable "\*.rec" files found, the script shows an appropriate error and exits. See the sample run for more detail about error.

After finding all readable "\*.rec" files, the first task of your script is to present a prompt to its user. The prompt will be

command:

There should be a space after the ":" character. To allow the user to enter commands in the same line as the prompt, use printf instead of echo (look up the man page for printf for more information).

For this lab exercise, there are only two commands your script must handle. If any other command is entered, the script should reply

Unrecognized command!

and then present the prompt again. The two commands are:

1. quit - The script must exit. If the user enters q, accept as the "quit" command
2. list - The script shows the list of found readable "\*.rec". If the user enters l “lower case el”, accept as the "list" command and shows:

Here is the list of found class files:

…

Following is a sample run that shows the expected behavior of the script.

**% lab3.sh ~**

You should enter the path name for class files

Use: lab3.sh path

Example lab3.sh ~

##{When the script cannot find any readable “\*.rec” file}

**% lab3.sh ~**

There is not readable \*.rec file exists in the specified path or its subdirectories

**% lab3.sh ~**

**command: goodbye**

Unrecognized command!

**command: list**

here is the list of found class files

/cs/home/nsajadi/lab3/os.rec

**command: quit**

**%**