

Lab 10 – Shell Script: Arrays

Part I

Use *array* to write a shell script to print out the information about the files and directories in the current directory according to the following sample run.

```
>>>>> ls
compute  print repeat
>>>>> compute
practice: shell command and array
list all directories and files in current directory: compute print repeat
total number of files and directories: 3
the first element in this list: compute
all elements in this list:
compute
print
repeat
>>>>>
```

Part II (choice A)

Two files *courses* and *emails* are given where columns are separated by tabs.

courses:

```
101    60212  90
101    60256  81
102    60231  70
102    60212  85
103    60256  n/a
```

emails:

```
101 101@uwindsor.ca
102 102@uwindsor.ca
103 103@uwindsor.ca
```

Write a bash script to find the emails of all students taking a specific course, which is given as a command line argument.

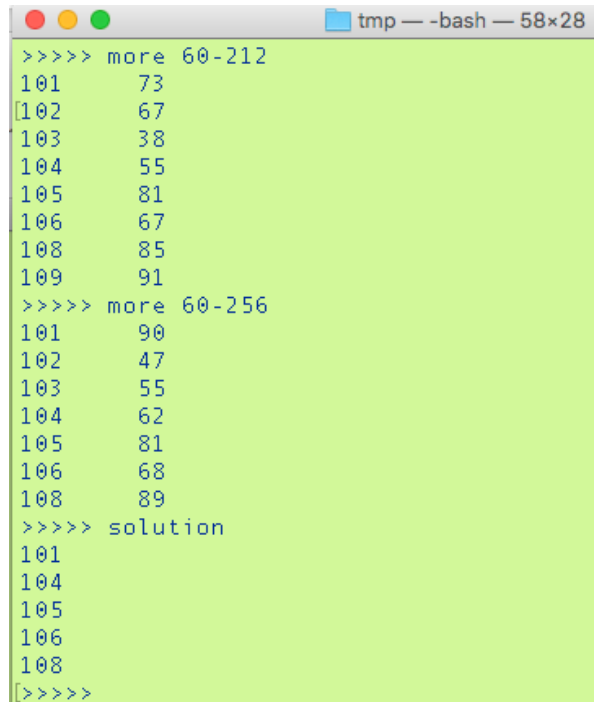
Hints: use *grep* command for the search, and use *array* to store intermediate data.

Sample output:

```
>>>> mysolution
usage: mysolution course-number
>>>> mysolution 60200
course number 60200 not found
>>>> mysolution 60256
101@uwindsor.ca
103@uwindsor.ca
```

Part II (choice B)

Two files 60-256 and 60-212 are given. Each contains two columns for student ids and the marks. Columns are separated by tabs. Write a bash script to print out all the ids of the students who passed both 60-256 and 60-212.



```
tmp — -bash — 58x28
>>>> more 60-212
101      73
102      67
103      38
104      55
105      81
106      67
108      85
109      91
>>>> more 60-256
101      90
102      47
103      55
104      62
105      81
106      68
108      89
>>>> solution
101
104
105
106
108
[>>>>
```

Part III (optional)

In the current directory, there are several files starting with 60-. The total number of such files could be changed, and the names of these files are not known. Each file contains two columns: student ids and the marks. Columns are separated by tabs. Write a bash script to print out all the ids of the students who passed all the courses.