**HKUSPACE Community College**

**Shell Programming**

**Programming Assignment 1**

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| **Student Name** | Liu Tin Nok, Keith |
| **Student No** | 20023919 |
| **Class** | CL02 |

**Part A**

1. Explain how you generate random PIN with different length. (1 marks)

I have applied /dev/urandom to generate random number. I also used command head to views the beginning of the output with -c display the final result as a random PIN.

1. Explain how you count the number of files in a folder (1 marks)

I have applied find command to search for files by using 3 different search options. used grep command with -c display the final number of files in a folder.

**Part B**

1. Explain how you can make use of the code in Part A to do Part B. (1 marks)

I use ‘./xxxxx.sh $xx’ to load the sh file inside the sh.

1. Explain how you can know your file is zipped successfully before you remove it. (1 marks)

I use the && characters execute the second command if the first command succeeds.

**Part C**

1. Explain how you generate and handle the PINs with leading zeros. (1 marks)

I set a max length in the while loop and seq it.

1. How can you hidden the all error messages when trying the PINs? (1 marks)

I use >/dev/null 2>&1 to hide it.

**Part D**

1. Explain how you can read in and process the password from the password csv file. (1 marks)

I used ‘cut’ to read passwords.

1. How can you make sure the file is unzip and placed in next to the original folder but not the present working directory (PWD). (1 marks)

I use -d ‘dirname $2’.

**Part E**

1. Explain how you apply the lock breaker script to every file in the specified directory. (1 marks)

I coded a new script to do the unlocking work. Not just using ‘./xxxx.sh’.

1. Explain how you can handle the invalid input of $1 & $2. (1 marks)

I applied find $\_ | wc -l to check if it out 0 or 1. And use if elif to validate it.