

CSC424 System Administration

Instructor: Dr. Hao Wu

Week 8 Bash Scripting - 3

Exercise 1

- Write a script to simulate the progress bar. The script should show the dynamic change of the progress.

```
Haos-MacBook-Pro:scripts hao$ ./progress  
[#####]  
#####] [100%] -
```

- Options for echo:

-n	do not output the trailing newline
-e	enable interpretation of backslash escapes
\r	carriage return

Exercise 2

- Moving Car: write a script that displays a car moving on the screen

Exercise 3

- Write a script to get a user input and convert all lowercase letters to uppercase letters

Exercise 4

- Write a script to read a sentence from user input and reverse sentence. For instance, the user input is:
- "sentence"
- The output is:
- "ecnetnes"

Exercise 5

- Caesar cipher:
- Write a script to encrypt a sentence using caesar cipher.
- Caesar cipher is a type of substitution cipher in which each letter in the plaintext is replaced by a letter some fixed number of positions down the alphabet. For example:
- Plain: ABCDEFGHIJKLMNOPQRSTUVWXYZ
- Cipher: XYZABCDEFGHIJKLMNOPQRSTUVWXYZ

Exercise 6

- Write a program that randomly generate student records:
student name, student id (2018xxxx)

Exercise 7

- Write a script that reads student record from database file created by previous script. Create users account for each student and set their password as their student ID.