UMass Boston CS 240
Homework 1
Due on Mon 18:45PM, 9/16/2019

The purpose of this assignment is to familiarize you with the basic tools you will be using throughout the semester. Upon completing this assignment you will have used the basic Linux commands we covered in class, used a text editor, written/executed your first C program, and copied files from your laptop to a remote server.

As part of this assignment, you should be reading K&R Chapter 1. Open a terminal and try the Linux commands as you read about them.

1   Try Some Linux Commands (20 points)

Log onto the department server and create a folder called hw1 in your cs240 directory. Make sure it is exactly hw1, not HW1, not homework1, not Hw1.

2   Write and Run a C Program (30 points)

Use a Linux text editor to create a C source code named my_name.c to print out your name under directory hw1. And the coding style has to be the similar to this program below, file comments, indentation etc. Compile it into my_name file and run it.

```
/* Project: hw1
 * Name    : Haoyu Wang
 * Date    : 09/08/2019
 * File    : my_name.c
 * Notes   : prints out my name Haoyu Wang
 */
#include <stdio.h>

int main(void)
{
  printf("Haoyu Wang!\n");
  return 0;
}
```

Note: Do not touch the files in your hw1 directory after the deadline.

3   Transfer Files (20 points)

Download hw1.pdf and styleGuidelines.pdf to your machine. Transfer these two files to your hw1 directory on the department server.

Note: the styleGuidelines is a coding style that professor Ouyang requires. It is professional and beneficial for you to develop a good coding habit. But I do not strictly require it. I add it for the knowledge of our ambitious learners. You can read it for reference.

4 Script (30 points)

The script command in Linux is used to record all the terminal activities. After you run the script command, all the terminal activities will be recorded into a typescript file until you run the exit command.

(Note, you can give the typescript file a name by running the script the_name command. But you do not do it for this homework.)

For example:

```
haoyu@itserver6:~$ script
Script started, file is typescript
haoyu@itserver6:~$ pwd
/home/haoyu
haoyu@itserver6:~$ cd cs240/
haoyu@itserver6:~/cs240$ pwd
/home/haoyu/cs240
haoyu@itserver6:~/cs240$ ls
helloworld.c  std  std.c
haoyu@itserver6:~/cs240$ exit
exit
Script done, file is typescript
haoyu@itserver6:~$ cat typescript
Script started on Fri 06 Sep 2019 09:58:07 PM EDT
haoyu@itserver6:~$ pwd
/home/haoyu
haoyu@itserver6:~$ cd cs240/
haoyu@itserver6:~/cs240$ pwd
/home/haoyu/cs240
haoyu@itserver6:~/cs240$ ls
helloworld.c  std  std.c
haoyu@itserver6:~/cs240$ exit
exit

Script done on Fri 06 Sep 2019 09:58:44 PM EDT
haoyu@itserver6:~$
```

Now, log on to the department server stay in your home directory and start the script command.
Then run these command successively: pwd, ls, cd cs240, cd hw1, cat my_name.c, ./my_name, exit.
At last, print out the typescript you get, and submit a hard copy of it in class, on Monday, Sep, 16.
Do not touch typescript file after the deadline.
(Note: you could download typescript or copy it to your home machine for printing it out. Or you can run lpr typescript, if you are using a linux computer in the Unix/Linux Lab.)