# CST8177 W15 Pre-SBA

**Name:** _____

**Student ID:** _____

**Lab section**: _____

**The full mark for the SBA is 10.**

Fresh install CentOS and set up the testing directory **sba** under your home directory _before_ SBA.

Use Putty to log in your CentOS. Keep the result of each task on the window of Putty until you demoed to the lab teacher. You can open another Putty window to do the following task.

| | Task(s) | Mark | In-lab signoff |
|---|---|---|---|
| **0** | Record the command (bonus) | 1 | |
| **1** (choose one) | Use basic regular expressions to print out from a text file the following lines: start with optional whitespace then the string `first`. | 1 | |
| | Use extended regular expressions to print out from a text file the following lines: consist of a single non-negative integer less than 24, for a valid hour in 24-hour times. **Demo:** use the command `wc` to count your results. | 1 | |
| **2** (choose one) | Create a script file called `myscript`. Only one argument will be needed for the script. If the argument is `A` or `a`, the script should display the name of current login user. If `B` or `b` is chosen, the current date information should be displayed. If `Q` or `q` is chosen, the script should end. If less or more than one argument is provided by users, good error messages should be produced. **Demo:** show the content of the script with the command `"cat myscript"`, then run the script and try all possible arguments including not correct number of arguments. | 3 | |

| | | | |
|---|---|---|---|
| | Write a script `proc-kill` to find a process and kill the process with TERM signal. The name of the process will be passed to the script as an argument. If less or more than one argument is provided by users, good error messages should be produced.<br>**Demo:** show the content of the script with the command "`cat proc-kill`", then run the command "`service ntpd start`" before running your script. Run your script with the argument "`ntpd`". | 3 | |
| **3** | Create a user account as follows.<br>Username: `netuser1`<br>home directory: `/home/netuser1`<br>Then, create a group with the name `project` and add the account `netuser1` into this group.<br>**Demo**: read the content of the file /etc/passwd and /etc/group using the following commands.<br>#grep 'netuser1' /etc/passwd<br>#grep 'netuser1' /etc/shadow<br>#grep 'project' /etc/group | 3 | |
| **4 (choose one)** | In your second hard disk `sdb`, create a new swap partition of size 300 MB. Be sure it is mounted every time you boot up | 3 | |
| | In your second hard disk `sdb`, create a new ext4 partition of size 400 MB. Be sure it is mounted every time you boot up<br>**Demo**: #fdisk -cul<br>#cat /etc/fstab | 3 | |