

1. (10 points)

vim helps you to edit files on your system. If you supply a filename, vim tries to open the file when it starts. For example;

```
$ vim /home/ilker/scripts/aSampleScript.sh
```

Assume you have a script you want to edit, named *myScript.sh*, but you don't remember where you have moved it. The script runs when you type its name, so it must be in your PATH. Write a single line command that loads the script file to **vim**.

2.**a. (10 points)**

Write a script which gives the below output. You should use nested loop structures.

```
sample run: $./sampleScript.sh
#
# #
# # #
```

b. (10 points)

Modify your answer to question 2.a in such a way that your script takes an argument as the string to be displayed as in the same format of the output of question 2.a.

```
sample run: $./modifiedSampleScript.sh CE350
CE350
CE350 CE350
CE350 CE350 CE350
```

3. (10 points)

Name two UNIX/Linux system environment variables and what they are used for.

4. (10 points)

Give file *mySecretData.dat*

- a. read and write permissions only for its owner.
- b. read, write, execute permissions for its owner, read and write permissions for the group and only executable permission for others.

NOTE: Use decimal numbering system for permissions.

5.

a. (10 points)

One of your non-computer-savvy friends has just decided to use UNIX. Help him/her by creating a **REN** command. On DOS, REN command renames a file. So, the command:

```
REN f1.txt f2.txt
```

renames f1.txt to f2.txt.

b. (10 points)

How can you make above REN command permanently available to use?

6. (15 points)

If a user tries the following commands in the working directory, what might be the aim of the user?

- a. `$ ls abc[123]`
 - b. `$ ls -l [ab]*`
 - c. `$ grep -f '$HOME' myFile`
 - d. `$ grep -r 'ilker' /home`
 - e. `$ who | grep ilker > outFile`
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7. (15 points)

Write a script called *checking* that will do the following:

- i. Take a command-line argument, a user's login name.
- ii. Test to see if a command-line argument was provided.
- iii. Check to see if the user is in the `/etc/passwd` file. If so, print “Found <user> in the `/etc/passwd` file”; otherwise, print “No such user on our system”.