**COMP 2766: Introduction to Linux**

**Practice Skills Exam**

1. Create an environment variable named FRUIT and set its value to Apple
2. Redirect the date command’s standard output to a file named Apple\_pie\_is\_good.txt in user root’s home directory. The redirection ***MUST*** dereference the FRUIT variable.
3. Redirect stdout to a file named ~/myout and stderr to a file named ~/myerr for the following command line: head -1 /etc/rc.d/rc\*
4. Copy the /var/spool/ directory and its entire contents, including subdirectories, to user root’s home directory and name the copy myspool
5. Output only the regular files in your present working directory that can be edited by the other user/access class (a.k.a the world).
6. Output only the names of the visible files in /etc/ that contain at least two digits in the name.
7. In user root’s home directory, create a link named mypasswd to /etc/passwd
8. Output only lines 4 and onward from /etc/inittab
9. In user root’s home directory, create a directory named public that others can only access and list the contents of. Configure all necessary permissions, but do ***NOT*** grant any more than needed to achieve this task. You should test your work!
10. In user root’s home directory, create a directory named project. Configure all necessary permissions, so that:

* only user root and members of group music can list the contents of the project/ directory, create files in that directory, and delete files from that directory
* users other than root must not be allowed to delete other users’ files from the project/ directory
* files created in the project/ directory are automatically owned by group music.

1. Output only the names of the visible files in /etc/ that start with a lowercase vowel. The vowels are a, e, i, o, and u.
2. Output only the number of (that is, how many) 5 character words in /usr/share/dict/words that both begin and end with a lowercase vowel to a file named vowels in user root’s home directory. The lowercase vowels are a, e, i, o, and u. For example, the word *igloo* is a 5 character word that both begins and ends with a lowercase vowel, whereas the word *event* is not.
3. Output only the words in /usr/share/dict/words that begin with at least 2 vowels, upper or lowercase. The vowels are a, e, i, o, u, A, E, I, O, U.
4. Run the following command line in the background: cat /dev/zero > /dev/null
5. Terminate the job referred to in the previous step without bringing it back to the foreground.
6. Create a group named marketing. Then, using a single command line, create a user named cathy who is a member of the secondary group named marketing.
7. Create a pipeline that outputs only the name of the highest earning employee in the emp.lst file.
8. Using regex, output only the lines in the emp.lst file that pertain to employees whose surname is spelled truman or trueman.
9. Using command substitution, give a command line that outputs the following, using the actual system date and time:

Today is Fri Dec 16 20:47:44 PST 2023

1. Give a command line that outputs only a list of the users who belong to group linux.
2. Allow only user student to execute only the following command line:

# cat /var/log/messages