

# Lab 1: EC2 Files

## Question 1

```

97 alias alert='notify-send --urgency=low -i "${?} = 0" && echo terminal || echo error" "$(history|tail -n
98
99 # Alias definitions.
100 # You may want to put all your additions into a separate file like
101 # ~/.bash_aliases, instead of adding them here directly.
102 # See /usr/share/doc/bash-doc/examples in the bash-doc package.
103
104 if [ -f ~/.bash_aliases ]; then
105     . ~/.bash_aliases
106 fi
107
108 # enable programmable completion features (you don't need to enable
109 # this, if it's already enabled in /etc/bash.bashrc and /etc/profile
110 # sources /etc/bash.bashrc).
111 if ! shopt -oq posix; then
112     if [ -f /usr/share/bash-completion/bash_completion ]; then
113         . /usr/share/bash-completion/bash_completion
114     elif [ -f /etc/bash_completion ]; then
115         . /etc/bash_completion
116     fi
117 fi
118
119 # Setting environment variables for user "ubuntu"
120 export JAVA_HOME=/usr/lib/jvm/default-java
121
122 # Adding to path environment variable
123 export PATH=$PATH:~/spark-3.3.1-bin-hadoop3/bin
124 export PATH=$PATH:~/hadoop-3.3.4/bin:~/hadoop-3.3.4/sbin
125

```

## Question 2

Adding lines to `~/.bashrc` file helps user customize their session on login. On login the scripts in the `~/.bashrc` files are executed.

`export JAVA_HOME=/usr/lib/jvm/default-java`

- Sets the environment variable `JAVA_HOME` to the root directory of default java installation

`export PATH=$PATH:~/spark-3.3.1-bin-hadoop3/bin`

- Add the Apache Spark executables directory's path to the `PATH` environment variable

`export PATH=$PATH:~/hadoop-3.3.4/bin:~/hadoop-3.3.4/sbin`

- Add the Apache Hadoop executables directory's path to the `PATH` environment variable

## Question 3

```

ubuntu@ip-172-31-23-6:~$ ls -la
.
..
.bashrc      .mysql_history  .sudo_as_admin_successful  hadoop-3.3.4.tar.gz
.cache       .profile        .vscode-server             spark-3.3.1-bin-hadoop3
.bash_history .config         .python_history            spark-3.3.1-bin-hadoop3.tgz
.bash_logout .mongodb        .ssh                      hadoop-3.3.4

ubuntu@ip-172-31-23-6:~$ mkdir lab-test
ubuntu@ip-172-31-23-6:~$ ls
hadoop-3.3.4  hadoop-3.3.4.tar.gz  lab-test  spark-3.3.1-bin-hadoop3  spark-3.3.1-bin-hadoop3.tgz
ubuntu@ip-172-31-23-6:~$ touch sample.txt
ubuntu@ip-172-31-23-6:~$ cat >> sample.txt
This is a sample file.
ubuntu@ip-172-31-23-6:~$ cat sample.txt
This is a sample file.
ubuntu@ip-172-31-23-6:~$ cd lab-test
ubuntu@ip-172-31-23-6:~/lab-test$ cp ../sample.txt test.txt
ubuntu@ip-172-31-23-6:~/lab-test$ ls
test.txt
ubuntu@ip-172-31-23-6:~/lab-test$ mv ../sample.txt .
ubuntu@ip-172-31-23-6:~/lab-test$ ls
sample.txt  test.txt
ubuntu@ip-172-31-23-6:~/lab-test$ rm test.txt
ubuntu@ip-172-31-23-6:~/lab-test$ ls
sample.txt
ubuntu@ip-172-31-23-6:~/lab-test$ rm *.txt
ubuntu@ip-172-31-23-6:~/lab-test$ ls
ubuntu@ip-172-31-23-6:~/lab-test$ cd ..
ubuntu@ip-172-31-23-6:~$ rmdir lab-test
ubuntu@ip-172-31-23-6:~$ ls
hadoop-3.3.4  hadoop-3.3.4.tar.gz  spark-3.3.1-bin-hadoop3  spark-3.3.1-bin-hadoop3.tgz
ubuntu@ip-172-31-23-6:~$

```

## Question 4

1. ls – List information about files and directories in the current directory
2. cd – Change the current working directory to destination directory
3. cp – Copy file(s) or directories from source to destination
4. mv – Move file(s) or directories from source to destination OR rename source to destination
5. rm – Remove/Delete file(s)
6. cat – Concatenate files to standard output
7. mkdir – Create new folder
8. rmdir – Remove/Delete folder if empty