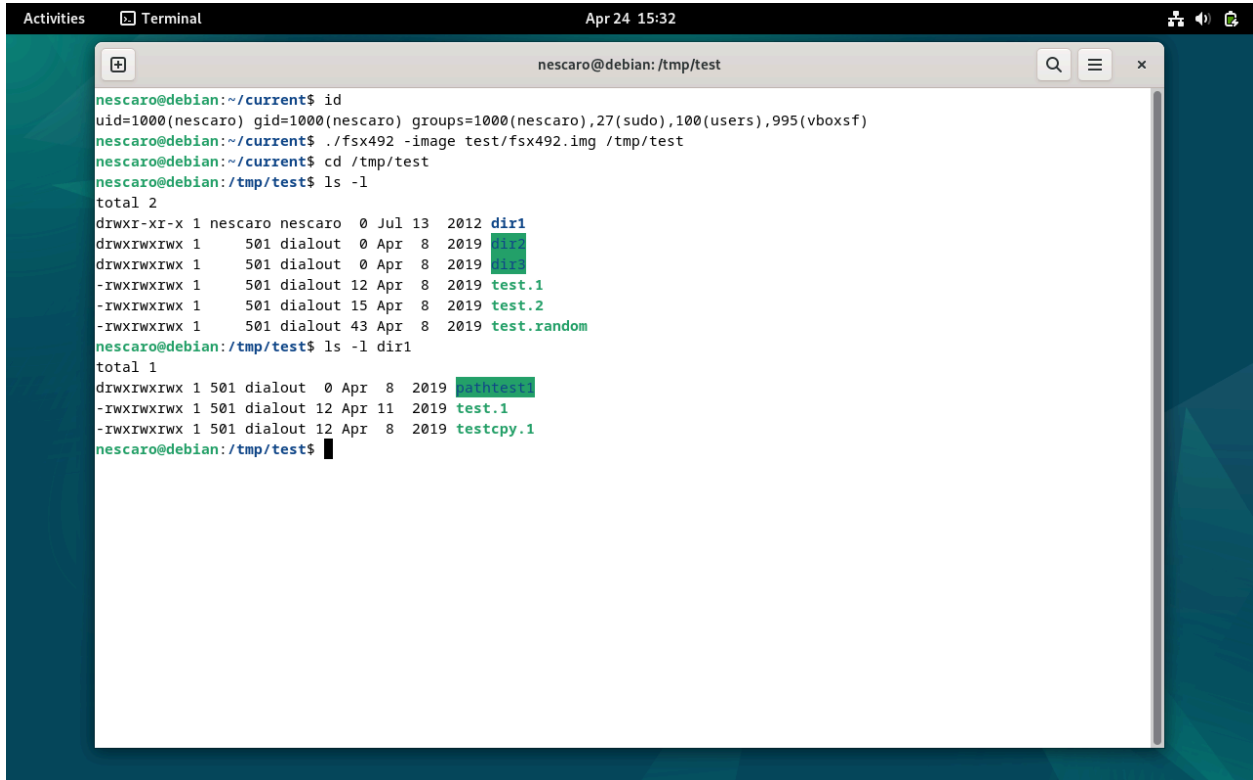


Names: Nathaniel Escaro, Ryan Eshan

Pledge: I pledge my honor that I have abided by the Stevens Honor System.

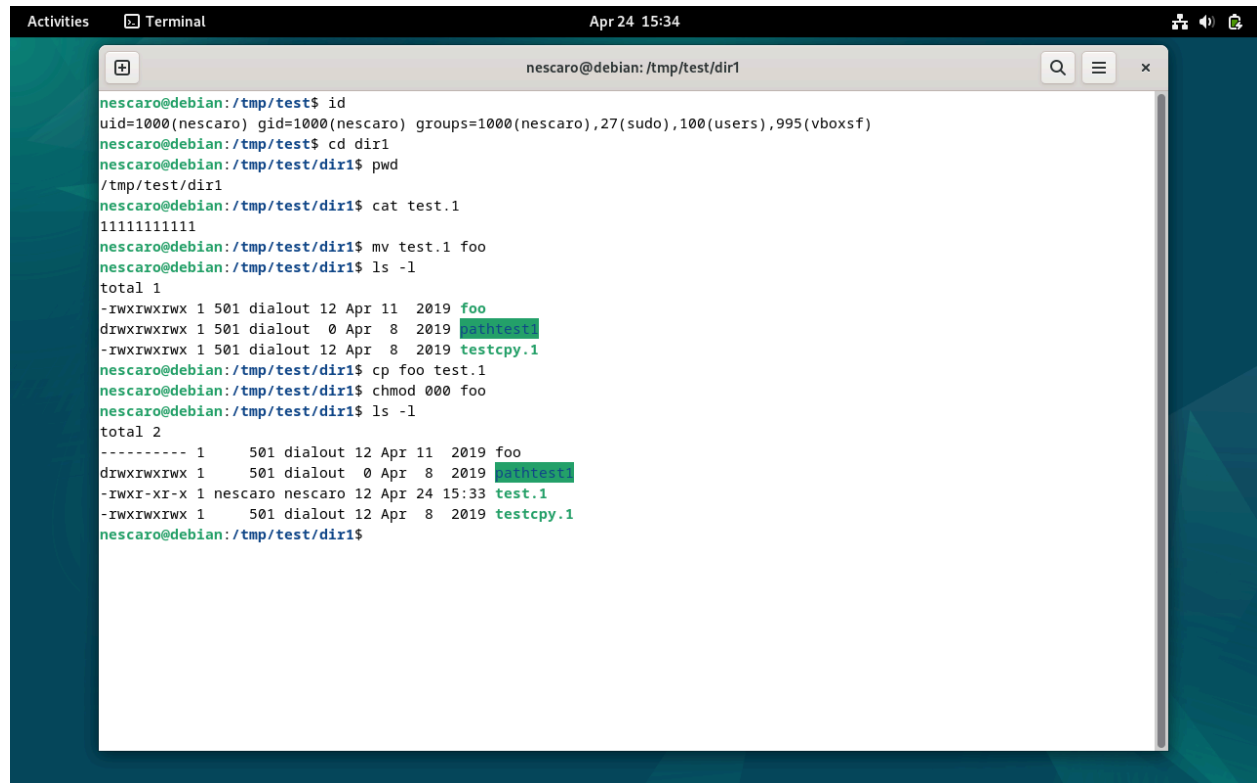
Project Screenshots

Executing the first set of test commands. It lists all the files within the file system's root directory that is currently mounted to "/tmp/test". Then, it lists the files inside of "dir1".

A screenshot of a Linux terminal window. The window title is "nescaro@debian: /tmp/test". The terminal shows the following commands and output:

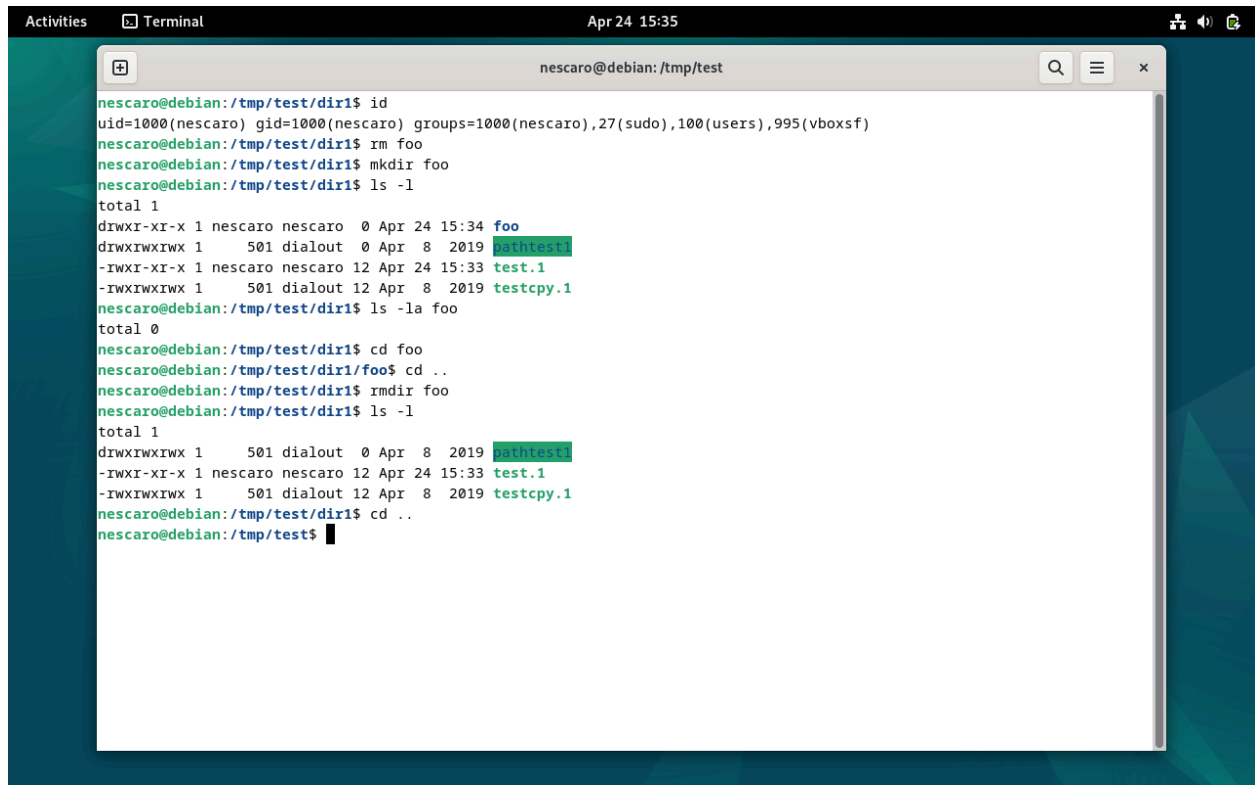
```
nescaro@debian:~/current$ id
uid=1000(nescaro) gid=1000(nescaro) groups=1000(nescaro),27(sudo),100(users),995(vboxsf)
nescaro@debian:~/current$ ./fsx492 -image test/fsx492.img /tmp/test
nescaro@debian:~/current$ cd /tmp/test
nescaro@debian:/tmp/test$ ls -l
total 2
drwxr-xr-x 1 nescaro nescaro 0 Jul 13 2012 dir1
drwxrwxrwx 1 501 dialout 0 Apr 8 2019 dir2
drwxrwxrwx 1 501 dialout 0 Apr 8 2019 dir3
-rwxrwxrwx 1 501 dialout 12 Apr 8 2019 test.1
-rwxrwxrwx 1 501 dialout 15 Apr 8 2019 test.2
-rwxrwxrwx 1 501 dialout 43 Apr 8 2019 test.random
nescaro@debian:/tmp/test$ ls -l dir1
total 1
drwxrwxrwx 1 501 dialout 0 Apr 8 2019 pathtest1
-rwxrwxrwx 1 501 dialout 12 Apr 11 2019 test.1
-rwxrwxrwx 1 501 dialout 12 Apr 8 2019 testcpy.1
nescaro@debian:/tmp/test$
```

Executing the second set of test commands. Inside of “dir1” we check the current working directory and print the contents of “test.1”. Next, “test.1” is renamed to “foo”, “foo” gets copied and the copy gets renamed to “test.1”, and all permissions are removed for the file “foo”. “ls -l” is called to list all files and modification times.



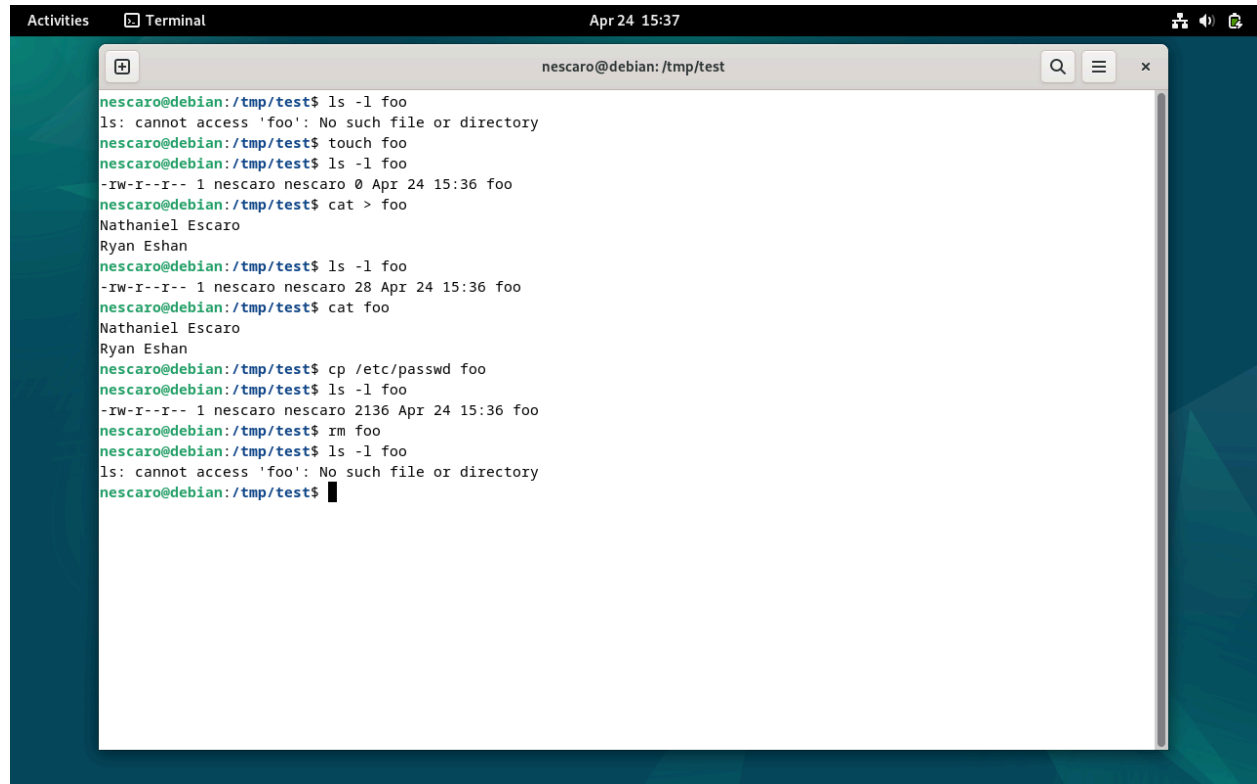
```
nescaro@debian: /tmp/test/dir1
nescaro@debian:/tmp/test$ id
uid=1000(nescaro) gid=1000(nescaro) groups=1000(nescaro),27(sudo),100(users),995(vboxsf)
nescaro@debian:/tmp/test$ cd dir1
nescaro@debian:/tmp/test/dir1$ pwd
/tmp/test/dir1
nescaro@debian:/tmp/test/dir1$ cat test.1
111111111111
nescaro@debian:/tmp/test/dir1$ mv test.1 foo
nescaro@debian:/tmp/test/dir1$ ls -l
total 1
-rwxrwxrwx 1 501 dialout 12 Apr 11 2019 foo
drwxrwxrwx 1 501 dialout 0 Apr 8 2019 pathtest
-rwxrwxrwx 1 501 dialout 12 Apr 8 2019 testcpy.1
nescaro@debian:/tmp/test/dir1$ cp foo test.1
nescaro@debian:/tmp/test/dir1$ chmod 000 foo
nescaro@debian:/tmp/test/dir1$ ls -l
total 2
----- 1 501 dialout 12 Apr 11 2019 foo
drwxrwxrwx 1 501 dialout 0 Apr 8 2019 pathtest
-rwxr-xr-x 1 nescaro nescaro 12 Apr 24 15:33 test.1
-rwxrwxrwx 1 501 dialout 12 Apr 8 2019 testcpy.1
nescaro@debian:/tmp/test/dir1$
```

Executing the third set of test commands. In “dir1”, we remove the previous “foo” file and instead make a directory called “foo”. It is then listed to show that it is a directory and then it is traversed into to show that there are no files in it, and then traversed out of. Lastly, “foo” is removed and the working directory returns to “/tmp/test”.



```
nescaro@debian: /tmp/test
nescaro@debian:/tmp/test/dir1$ id
uid=1000(nescaro) gid=1000(nescaro) groups=1000(nescaro),27(sudo),100(users),995(vboxsf)
nescaro@debian:/tmp/test/dir1$ rm foo
nescaro@debian:/tmp/test/dir1$ mkdir foo
nescaro@debian:/tmp/test/dir1$ ls -l
total 1
drwxr-xr-x 1 nescaro nescaro 0 Apr 24 15:34 foo
drwxrwxrwx 1 501 dialout 0 Apr 8 2019 pathtest
-rwxr-xr-x 1 nescaro nescaro 12 Apr 24 15:33 test.1
-rwxrwxrwx 1 501 dialout 12 Apr 8 2019 testcpy.1
nescaro@debian:/tmp/test/dir1$ ls -la foo
total 0
nescaro@debian:/tmp/test/dir1$ cd foo
nescaro@debian:/tmp/test/dir1/foo$ cd ..
nescaro@debian:/tmp/test/dir1$ rmdir foo
nescaro@debian:/tmp/test/dir1$ ls -l
total 1
drwxrwxrwx 1 501 dialout 0 Apr 8 2019 pathtest
-rwxr-xr-x 1 nescaro nescaro 12 Apr 24 15:33 test.1
-rwxrwxrwx 1 501 dialout 12 Apr 8 2019 testcpy.1
nescaro@debian:/tmp/test/dir1$ cd ..
nescaro@debian:/tmp/test$
```

Executing the fourth set of test commands. First, we show that the file “foo” does not exist. Then, “foo” gets created and our names are written into the file. Next, we run “ls -l” to show that the file has been modified and then print out the contents of “foo”. Afterwards, we overwrite “foo” with a copy of “/etc/passwd”, and then run “ls -l” to show that “foo” has changed. Lastly, “foo” is removed and is shown that the “ls” command cannot find it.



```
Activities Terminal Apr 24 15:37 nescaro@debian: /tmp/test
nescaro@debian:/tmp/test$ ls -l foo
ls: cannot access 'foo': No such file or directory
nescaro@debian:/tmp/test$ touch foo
nescaro@debian:/tmp/test$ ls -l foo
-rw-r--r-- 1 nescaro nescaro 0 Apr 24 15:36 foo
nescaro@debian:/tmp/test$ cat > foo
Nathaniel Escaro
Ryan Eshan
nescaro@debian:/tmp/test$ ls -l foo
-rw-r--r-- 1 nescaro nescaro 28 Apr 24 15:36 foo
nescaro@debian:/tmp/test$ cat foo
Nathaniel Escaro
Ryan Eshan
nescaro@debian:/tmp/test$ cp /etc/passwd foo
nescaro@debian:/tmp/test$ ls -l foo
-rw-r--r-- 1 nescaro nescaro 2136 Apr 24 15:36 foo
nescaro@debian:/tmp/test$ rm foo
nescaro@debian:/tmp/test$ ls -l foo
ls: cannot access 'foo': No such file or directory
nescaro@debian:/tmp/test$
```