

# Section 1:

```
sypercat00@kali: ~/task3
(sypercat00@kali)-[~/task3]
$
zsh: permission denied: ./program1.sh

(sypercat00@kali)-[~/task3]
$ chmod +x program1.sh

(sypercat00@kali)-[~/task3]
$ ./program1.sh
.bashrc file found. Appending environment variables...
Variables HELLO and LOCAL have been added to .bashrc.
Opening a new terminal...

(sypercat00@kali)-[~/task3]
$ ./program1.sh
.bashrc file found. Appending environment variables...
Variables HELLO and LOCAL have been added to .bashrc.
Opening a new terminal...

(sypercat00@kali)-[~/task3]
$

(sypercat00@kali)-[~/task3]
$

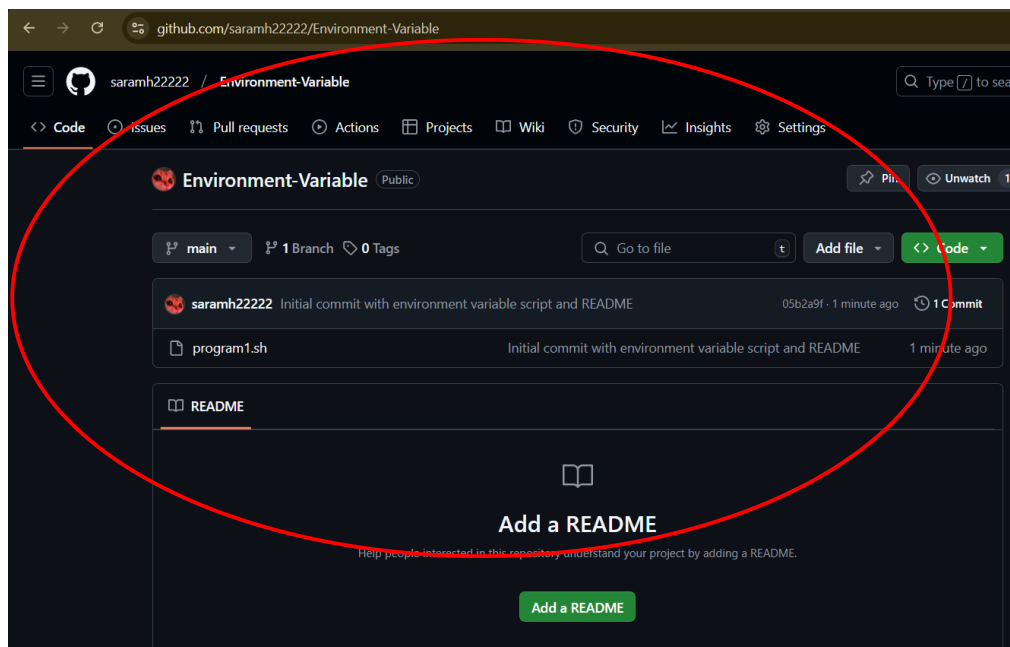
(sypercat00@kali)-[~/task3]
$

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$

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$

(sypercat00@kali)-[~/task3]
$

(sypercat00@kali)-[~/task3]
$ ./program1.sh
.bashrc file found. Appending environment variables...
Variables HELLO and LOCAL have been added to .bashrc.
```



```
sypercat00@kali: ~/task3

(sypercat00@kali)-[~/task3]
$ git add .

(sypercat00@kali)-[~/task3]
$ git commit -m "Initial commit with environment variable script and README"

[main (root-commit) 05b2a9f] Initial commit with environment variable script and README
1 file changed, 23 insertions(+)
create mode 100755 program1.sh

(sypercat00@kali)-[~/task3]
$ git branch -M main

(sypercat00@kali)-[~/task3]
$ git puch -u origin main
git: 'puch' is not a git command. See 'git --help'.

The most similar command is
push

(sypercat00@kali)-[~/task3]
$ git push -u origin main

Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 613 bytes | 153.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/saramh22222/Environment-Variable.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

## Section 2

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1. List the user commands and redirect the output to /tmp/commands.list

```
sypercat00@kali: ~/task3

netmask

(sypercat00@kali)-[~/task3]
$ ls /bin /usr/bin > /tmp/commands.list

(sypercat00@kali)-[~/task3]
$ cat /tmp/commands.list
/bin:
1password2john
2to3-2.7
411toppm
7z
7z2john
7za
7zr
DPAPImk2john
FileCheck-16
FileCheck-17
GET
GenPat
HEAD
JxrDecApp
JxrEncApp
POST
Thunar
UnicodeNameMappingGenerator-16
UnicodeNameMappingGenerator-17
VGAuthService
X
X11
Xephyr
Xorg
Xtightvnc
Xvfb
```

3. What is the command to count the word in a file or number of file in directory.

a. Count the number of user commands

```
(sypercat00@kali)-[~/task3]
$
(sypercat00@kali)-[~/task3]
$ ls
program1.sh
(sypercat00@kali)-[~/task3]
$ [200~wc -w filename
sh: bad pattern: ^[[200~wc
(sypercat00@kali)-[~/task3]
$ wc -w program1.sh
  03 program1.sh
(sypercat00@kali)-[~/task3]
$ ls | wc -l
(sypercat00@kali)-[~/task3]
$ wc -l /tmp/commands.list
497 /tmp/commands.list
(sypercat00@kali)-[~/task3]
$
```

4. What happens if you execute:

a. cat filename1 | cat filename2

b. ls | rm

c. ls /etc/passwd | wc -l

```
(sypercat00@kali)-[~]
$ vim file1
(sypercat00@kali)-[~]
$ vim file2
(sypercat00@kali)-[~]
$ cat file1 | cat file2
hello file2
(sypercat00@kali)-[~]
$ b. ls | rm
rm: missing operand
Try 'rm --help' for more information.
b.: command not found
(sypercat00@kali)-[~]
$ ls /etc/passwd
/etc/passwd
(sypercat00@kali)-[~]
$ ls /etc/passwd | wc -l
1
(sypercat00@kali)-[~]
$
```

5. Write a command to search for all files on the system that, its name is “.profile”.

```
(sypercat00@kali)-[~]
└─$ find / -name ".profile"
/home/sypercat00/.profile
find: '/.cache': Permission denied
find: '/lost+found': Permission denied
find: '/run/initramfs': Permission denied
find: '/run/systemd/inaccessible/dir': Permission denied
find: '/run/systemd/propagate/systemd-udev.service': Permission denied
find: '/run/systemd/propagate/haveged.service': Permission denied
find: '/run/systemd/propagate/systemd-timesyncd.service': Permission denied
find: '/run/systemd/propagate/accounts-daemon.service': Permission denied
find: '/run/systemd/propagate/systemd-logind.service': Permission denied
find: '/run/systemd/propagate/polkit.service': Permission denied
find: '/run/systemd/propagate/NetworkManager.service': Permission denied
find: '/run/systemd/propagate/ModemManager.service': Permission denied
find: '/run/systemd/propagate/rtkit-daemon.service': Permission denied
find: '/run/systemd/propagate/colord.service': Permission denied
find: '/run/systemd/propagate/upower.service': Permission denied
find: '/run/systemd/propagate/power-profiles-daemon.service': Permission denied
find: '/run/systemd/propagate/systemd-networkd.service': Permission denied
find: '/run/systemd/propagate/fwupd.service': Permission denied
find: '/run/cryptsetup': Permission denied
find: '/run/openvpn-client': Permission denied
find: '/run/openvpn-server': Permission denied
find: '/run/sudo': Permission denied
find: '/run/user/1000/systemd/inaccessible/dir': Permission denied
find: '/run/gdm3': Permission denied
find: '/run/udisks2': Permission denied
find: '/etc/credstore.encrypted': Permission denied
find: '/etc/openvas/gnupg': Permission denied
find: '/etc/redis': Permission denied
find: '/etc/vpnc': Permission denied
find: '/etc/ipsec.d/private': Permission denied
find: '/etc/polkit-1/rules.d': Permission denied
/etc/skel/.profile
find: '/etc/credstore': Permission denied
find: '/etc/ssl/private': Permission denied
find: '/tmp/systemd-private-246f727017cd45c4a81d4c1f6063a2ce-power-profiles-daemon.service-XzuQsQ': Permission denied
find: '/tmp/systemd-private-246f727017cd45c4a81d4c1f6063a2ce-colord.service-rHs0ti': Permission denied
find: '/tmp/systemd-private-246f727017cd45c4a81d4c1f6063a2ce-ModemManager.service-rbUel2': Permission denied
find: '/tmp/systemd-private-246f727017cd45c4a81d4c1f6063a2ce-upower.service-SULPxi': Permission denied
find: '/tmp/systemd-private-246f727017cd45c4a81d4c1f6063a2ce-systemd-logind.service-8iyCaZ': Permission denied
find: '/tmp/systemd-private-246f727017cd45c4a81d4c1f6063a2ce-haveged.service-BaaIo7': Permission denied
```

6. List the inode numbers of /, /etc, /etc/hosts.

**ls -li /**

**ls -li /etc**

**ls -li /etc/hosts**

7. Create a symbolic link of /etc/passwd in /boot.

**└─\$ sudo ln -s /etc/passwd /boot/passwd\_slink**

8. Create a hard link of /etc/passwd in /boot. Could you? Why?

**└─\$ ln /etc/passwd /boot/passwd\_hardlink**

**Hard links can only be created within the same filesystem.**

9. Echo \ it will jump to the next line, and will print >

Notice the prompt ">" what is that? and how can you change it from ">" to ":".

```
—(sypercat00@kali)-[~]
└─$ PS2=':'
—(sypercat00@kali)-[~]
└─$ echo \
:
```