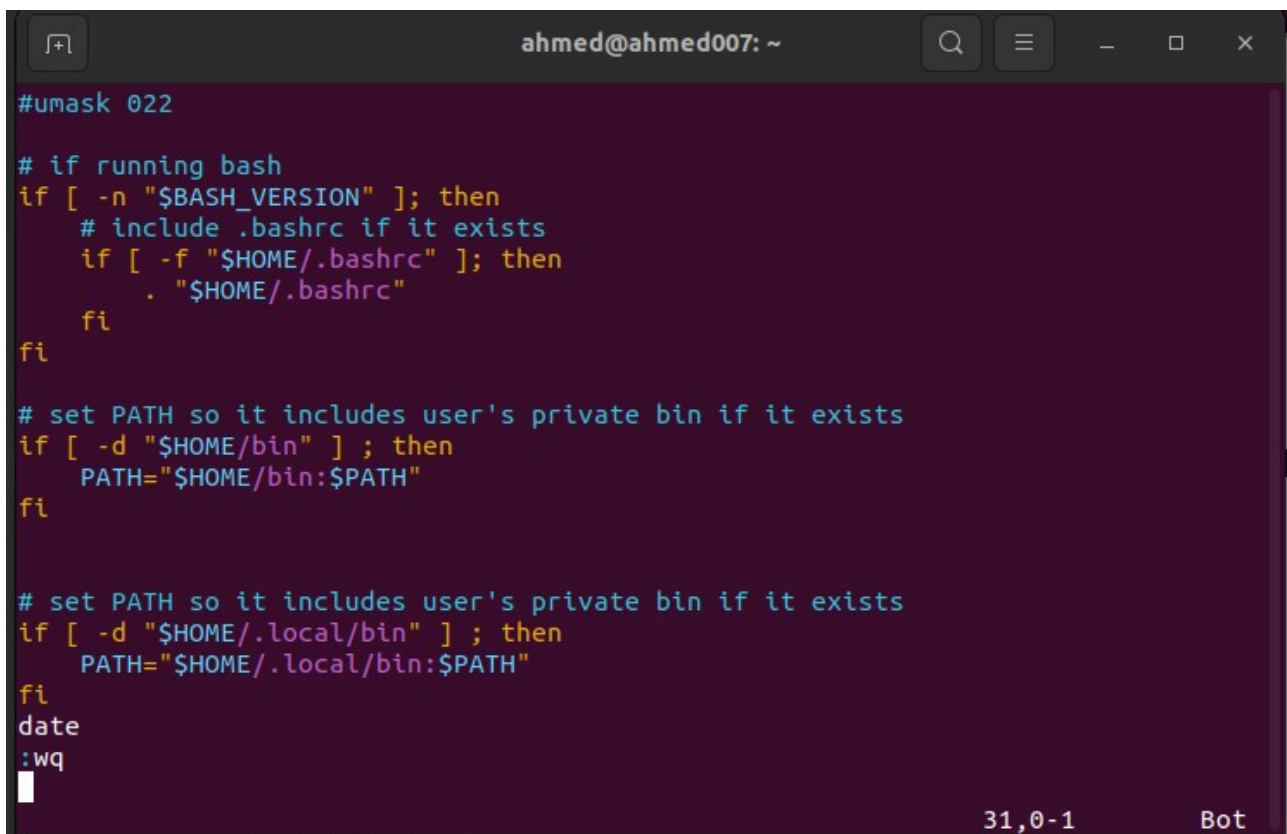


Question 1 )

```
ahmed@ahmed007:~/Desktop$ history > /tmp/commands.list
ahmed@ahmed007:~/Desktop$ cat /tmp/commands.list
```

Question 2)

A terminal window titled 'ahmed@ahmed007: ~' with search, menu, and window control icons in the title bar. The terminal displays the content of a .bashrc file. The text is as follows:

```
#umask 022

# if running bash
if [ -n "$BASH_VERSION" ]; then
    # include .bashrc if it exists
    if [ -f "$HOME/.bashrc" ]; then
        . "$HOME/.bashrc"
    fi
fi

# set PATH so it includes user's private bin if it exists
if [ -d "$HOME/bin" ] ; then
    PATH="$HOME/bin:$PATH"
fi

# set PATH so it includes user's private bin if it exists
if [ -d "$HOME/.local/bin" ] ; then
    PATH="$HOME/.local/bin:$PATH"
fi
date
:wq
```

The terminal shows a cursor at the end of the last line. In the bottom right corner, the text '31,0-1' and 'Bot' are visible.

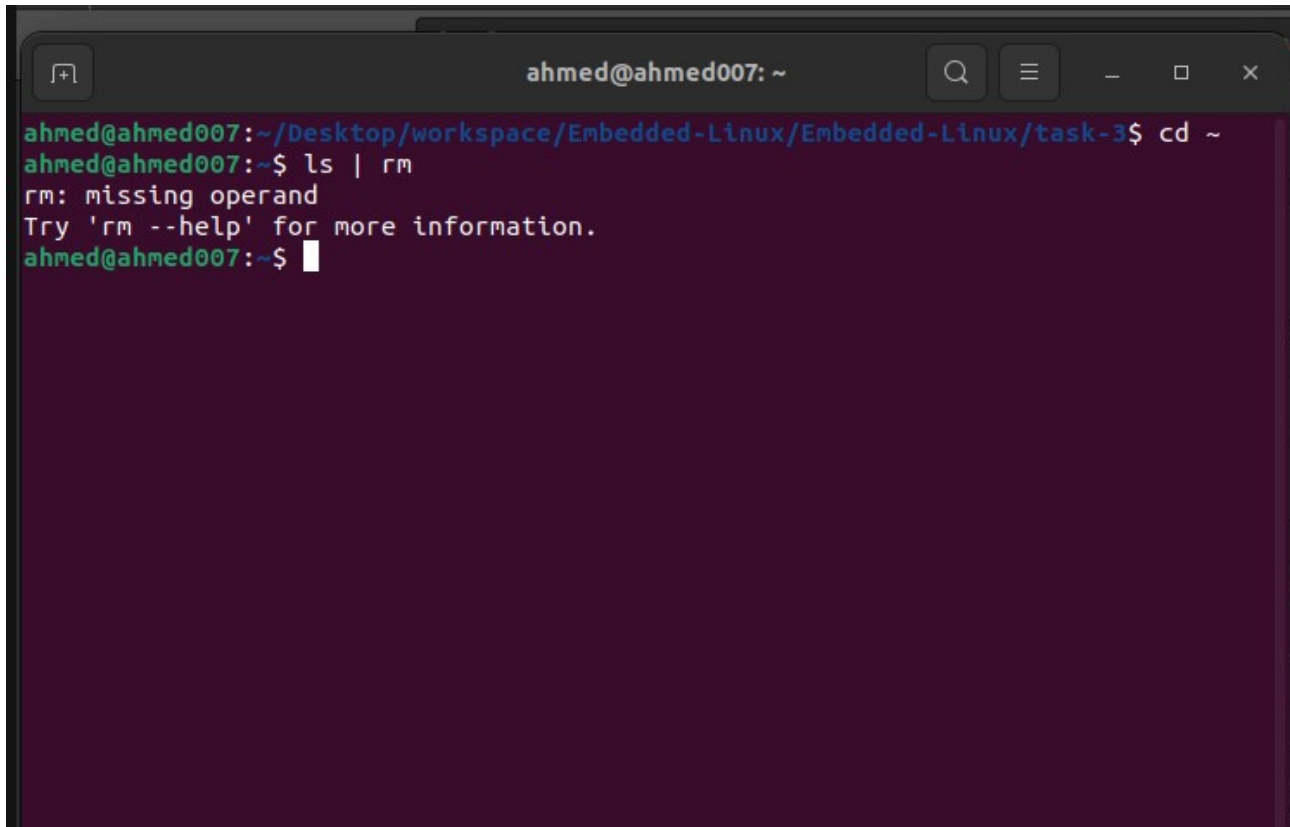
Question 3)

```
ahmed@ahmed007: ~  
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ cd ~  
ahmed@ahmed007:~$ wc -w /tmp/commands.list  
1679 /tmp/commands.list  
ahmed@ahmed007:~$ wc -m  
█
```

Question 4) a-

```
ahmed@ahmed007: ~/Desktop/workspace/Embedded-Linux/...  
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ cat Day  
3_answer.sh | cat token_link  
cat: token_link: No such file or directory  
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ █
```

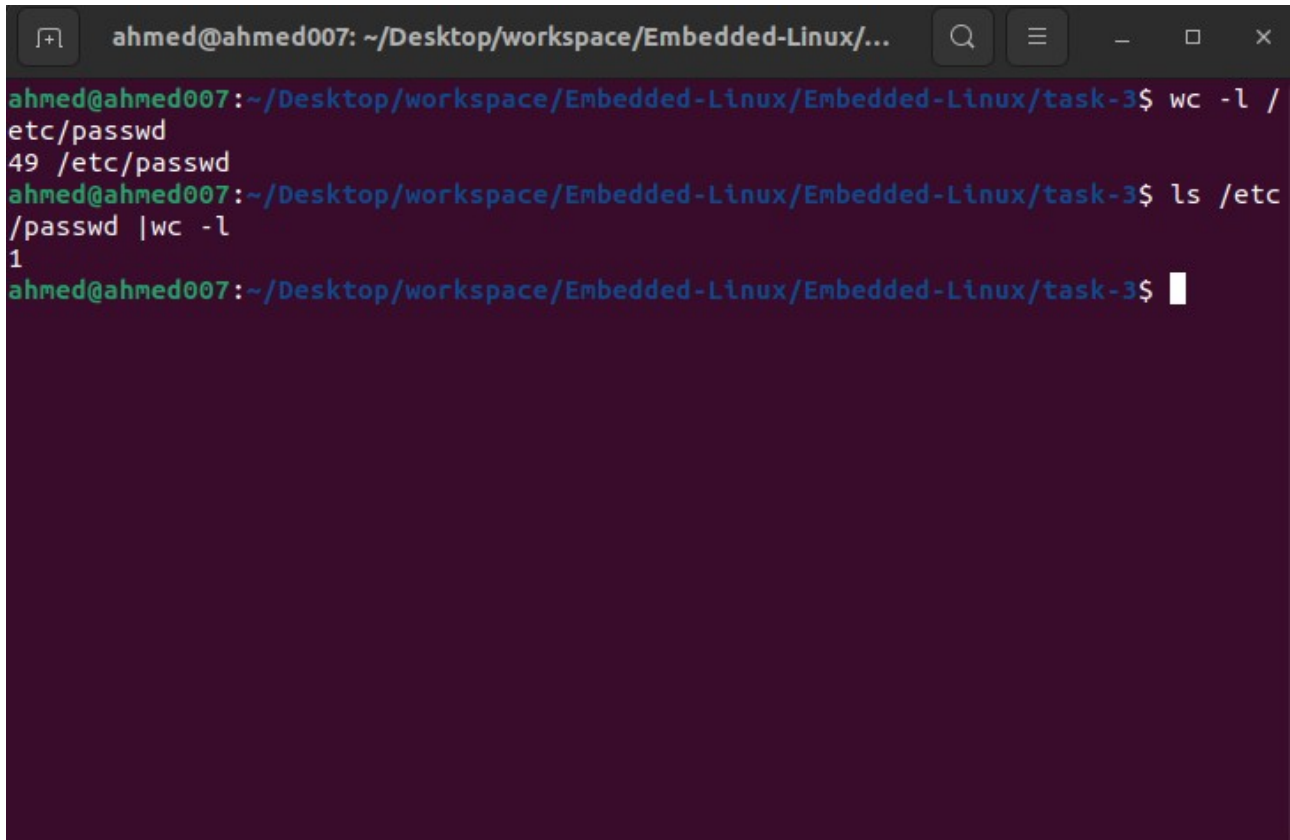
4B)



A terminal window titled 'ahmed@ahmed007: ~' with search, menu, and window control icons. The prompt is 'ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3\$'. The user enters 'cd ~', and the prompt changes to 'ahmed@ahmed007:~\$'. They then enter 'ls | rm', which results in an error: 'rm: missing operand' and 'Try \'rm --help\' for more information.' The prompt returns to 'ahmed@ahmed007:~\$'.

```
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ cd ~
ahmed@ahmed007:~$ ls | rm
rm: missing operand
Try 'rm --help' for more information.
ahmed@ahmed007:~$
```

4C)



A terminal window titled 'ahmed@ahmed007: ~/Desktop/workspace/Embedded-Linux/...' with search, menu, and window control icons. The prompt is 'ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3\$'. The user enters 'wc -l /etc/passwd', which outputs '49 /etc/passwd'. The prompt changes to 'ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3\$'. They then enter 'ls /etc/passwd | wc -l', which outputs '1'. The prompt returns to 'ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3\$'.

```
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ wc -l /etc/passwd
49 /etc/passwd
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ ls /etc/passwd | wc -l
1
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$
```

## Question 5 )

```
ahmed@ahmed007: ~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ wc -l /etc/passwd
49 /etc/passwd
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ ls /etc/passwd |wc -l
1
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ sudo find / -name .profile
[sudo] password for ahmed:
/etc/skel/.profile
find: '/run/user/1000/doc': Permission denied
find: '/run/user/1000/gvfs': Permission denied
/root/.profile
/snap/core20/2015/etc/skel/.profile
/snap/core20/2015/root/.profile
/snap/core20/1974/etc/skel/.profile
/snap/core20/1974/root/.profile
/snap/core22/1033/etc/skel/.profile
/snap/core22/1033/root/.profile
/snap/core22/864/etc/skel/.profile
/snap/core22/864/root/.profile
/home/ahmed/.profile
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$
```

The following Linux commands can be used to search files by name.

- `find /path -name *.txt`
- `find /path -type f -name test.txt`
- `find /path -name failed*. * -type f`
- `find /path -type f -not -name "*.html"`
- `find / -name "file.txt" -size +4M`
- `find /dev/ -type b -name "sda*"`

## Question 6 )

```
ahmed@ahmed007:~/Desktop/workspace/Embedded-Linux/Embedded-Linux/task-3$ cd ~
ahmed@ahmed007:~$ ls -l
5242962 Desktop 5245134 docs 5242966 Documents 5250112 Embedded-Linux 5242967 Music 5247512 oldpassword 5242965 Public 5242964 Templates 5242969 Videos
5247526 dir1 5247482 documents 5242963 Downloads 5247782 foldering-system 5247513 myDirectory 5242968 Pictures 5242955 snap 5247229 test.txt
ahmed@ahmed007:~$ ls -l /etc/hosts
Command 'list' not found, did you mean:
  Command 'mist' from snap mist (master)
  Command 'hist' from deb lokl (2.4.7.4-10)
  Command 'lift' from deb lift (2.6.0-1)
  Command 'dist' from deb nmh (0.4-4)
  Command 'dist' from deb nmh (1.7.1-11)
  Command 'last' from deb util-linux (2.37.2-4ubuntu3)
  Command 'klist' from deb krb5-user (1.19.2-2ubuntu0.2)
  Command 'klist' from deb heimdal-clients (7.7.0+dfsg-3ubuntu1)
  Command 'gist' from deb yorick (2.2.04+dfsg1-12)
  Command 'nlist' from deb mblaze (1.1-1)
  Command 'flist' from deb nmh (0.4-4)
  Command 'flist' from deb nmh (1.7.1-11)
See 'snap info <snapname>' for additional versions.
ahmed@ahmed007:~$ ls -l /etc/hosts
8650917 /etc/hosts
ahmed@ahmed007:~$
```

Question 7)

```
es
ahmed@ahmed007:~$ sudo ln -s /etc/passwd /boot/passwd.softlink
ahmed@ahmed007:~$
```

question 8)

```
es
ahmed@ahmed007:~$ sudo ln -s /etc/passwd /boot/passwd.softlink
ahmed@ahmed007:~$ sudo ln /etc/passwd /boot/passwd.hardlink
ahmed@ahmed007:~$
```