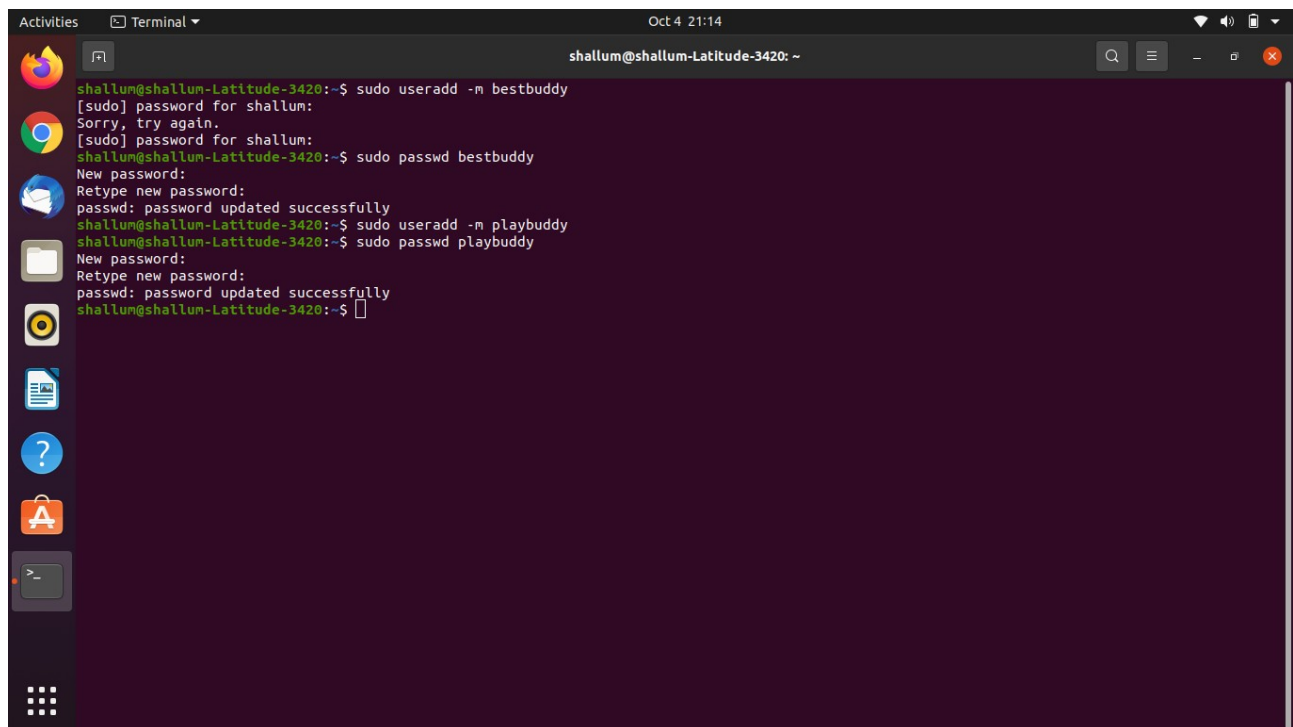


ASSIGNMENT - 1

Q.1 Create two users in your system called bestbuddy and playbuddy

-> Commands I have used:

- `sudo useradd -m bestbuddy`
- `sudo passwd bestbuddy`
- `sudo useradd -m playbuddy`
- `sudo passwd playbuddy`

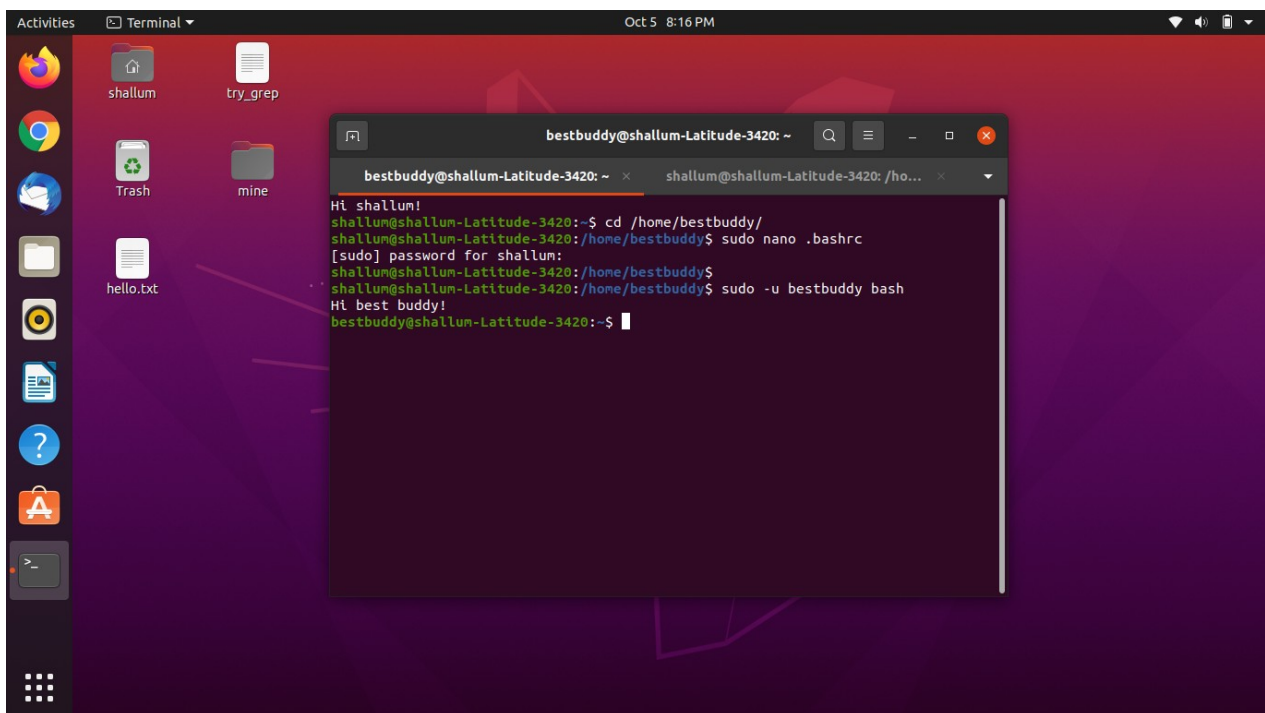


```
shallum@shallum-Latitude-3420:~$ sudo useradd -m bestbuddy
[sudo] password for shallum:
Sorry, try again.
[sudo] password for shallum:
shallum@shallum-Latitude-3420:~$ sudo passwd bestbuddy
New password:
Retype new password:
passwd: password updated successfully
shallum@shallum-Latitude-3420:~$ sudo useradd -m playbuddy
shallum@shallum-Latitude-3420:~$ sudo passwd playbuddy
New password:
Retype new password:
passwd: password updated successfully
shallum@shallum-Latitude-3420:~$
```

Q.2 Ensure that when the bestbuddy logs in they get a message "Hi Best Buddy" (Hint: Read about bashrc)

-> Commands I have used:

- `cd /home/bestbuddy`
- `sudo nano .bashrc`
- `echo "Hi best buddy!"`
- `sudo -u bestbuddy bash`

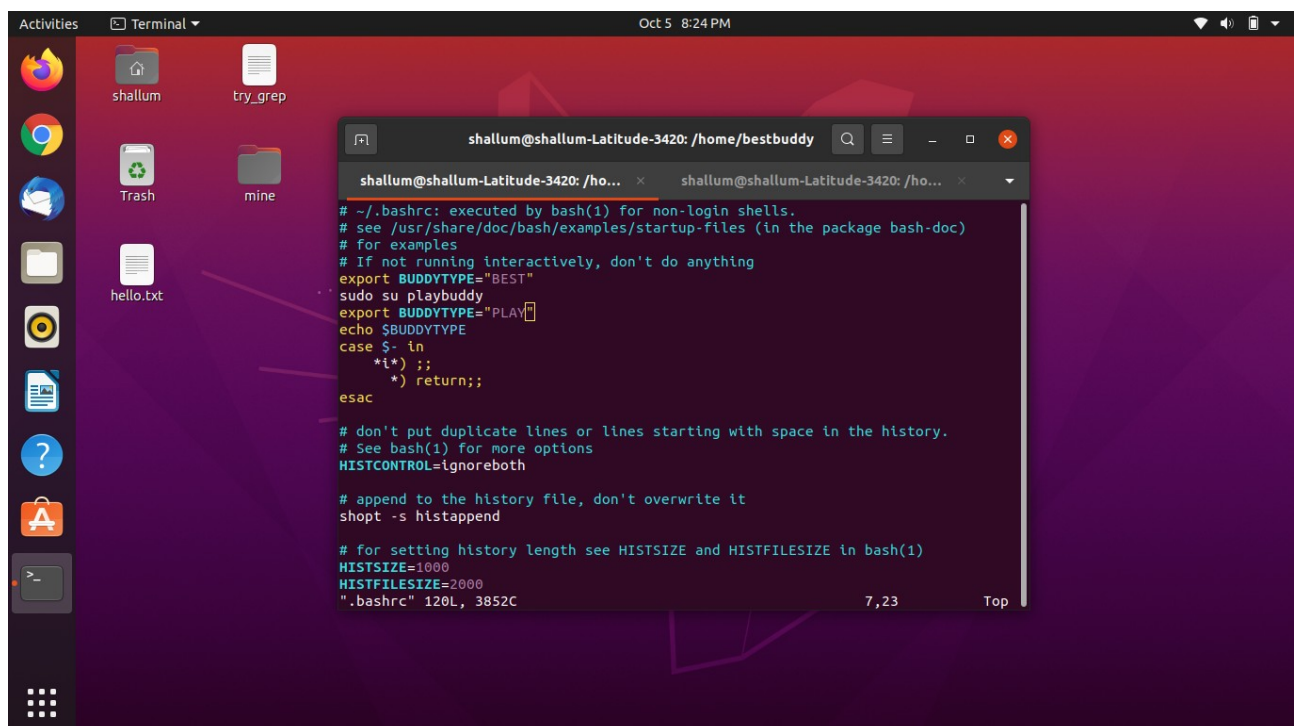


```
bestbuddy@shallum-Latitude-3420: ~  
bestbuddy@shallum-Latitude-3420: ~$ cd /home/bestbuddy/  
shallum@shallum-Latitude-3420:/home/bestbuddy$ sudo nano .bashrc  
[sudo] password for shallum:  
shallum@shallum-Latitude-3420:/home/bestbuddy$  
shallum@shallum-Latitude-3420:/home/bestbuddy$ sudo -u bestbuddy bash  
Hi best buddy!  
bestbuddy@shallum-Latitude-3420:~$
```

Q.3 Add the variable called BUDDYTYPE. for the bestbuddy this should be set to BEST and for playbuddy it should be set to PLAY

-> Commands I have used:

- `cd /home/bestbuddy`
- `sudo nano .bashrc`
- `export BUDDYTYPE="BEST"`
- `sudo su playbuddy`
- `export BUDDYTYPE="PLAY"`
- `echo "BUDDYTYPE"`



The screenshot shows a Linux desktop with a terminal window open. The terminal displays the contents of the `~/.bashrc` file, which includes comments and commands for setting environment variables and history. The terminal window title is `shallum@shallum-Latitude-3420: /home/bestbuddy`. The desktop background is a dark purple gradient with a faint geometric pattern. The left sidebar contains icons for various applications and files, including `shallum`, `try_grep`, `Trash`, `mine`, `hello.txt`, and a terminal icon at the bottom.

```
shallum@shallum-Latitude-3420: /home/bestbuddy
# ~/.bashrc: executed by bash(1) for non-login shells.
# see /usr/share/doc/bash/examples/startup-files (in the package bash-doc)
# for examples
# If not running interactively, don't do anything
export BUDDYTYPE="BEST"
sudo su playbuddy
export BUDDYTYPE="PLAY"
echo $BUDDYTYPE
case $- in
  *) ;;
  *) return;;
esac

# don't put duplicate lines or lines starting with space in the history.
# See bash(1) for more options
HISTCONTROL=ignoreboth

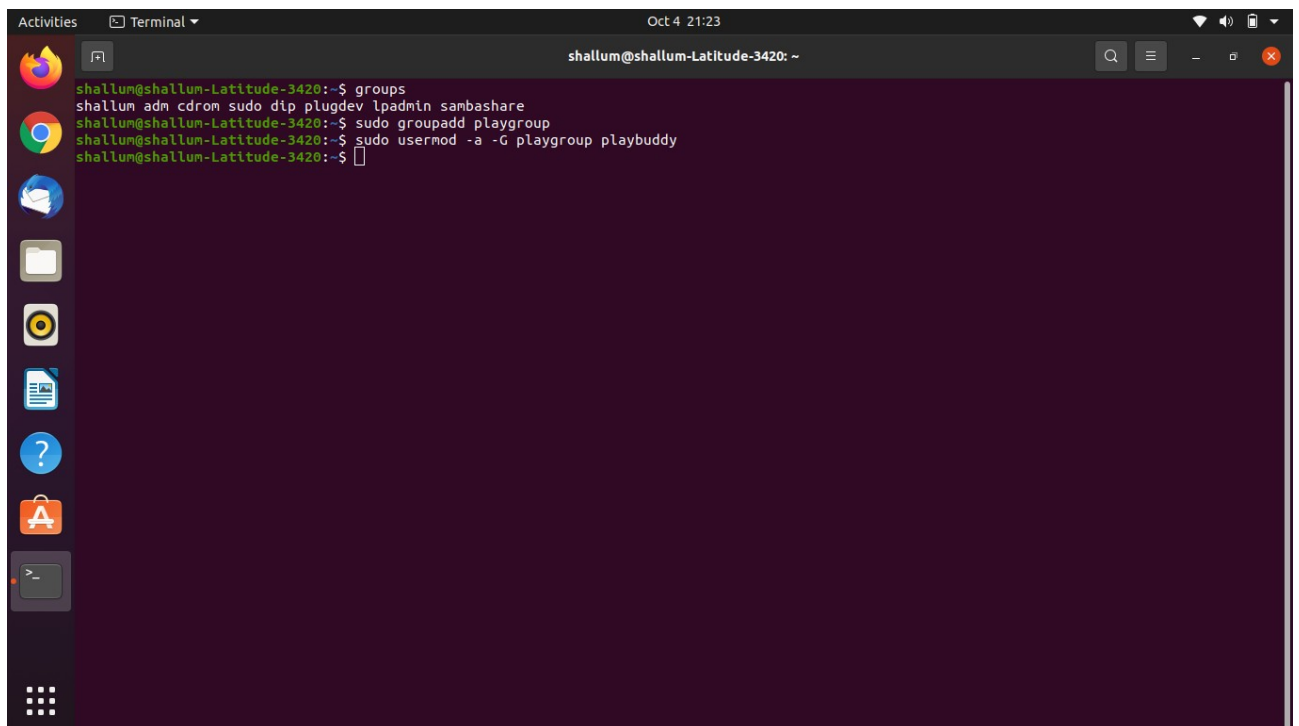
# append to the history file, don't overwrite it
shopt -s histappend

# for setting history length see HISTSIZE and HISTFILESIZE in bash(1)
HISTSIZE=1000
HISTFILESIZE=2000
".bashrc" 120L, 3852C
```

Q.4 Create a group called playgroup and add the playbuddy into the group

-> Commands I have used:

- `sudo groupadd playgroup`
- `sudo usermod -a -G playgroup playbuddy`
- `id playbuddy`



A screenshot of a Linux terminal window. The window title is "Terminal" and the date/time is "Oct 4 21:23". The terminal shows the following commands and output:

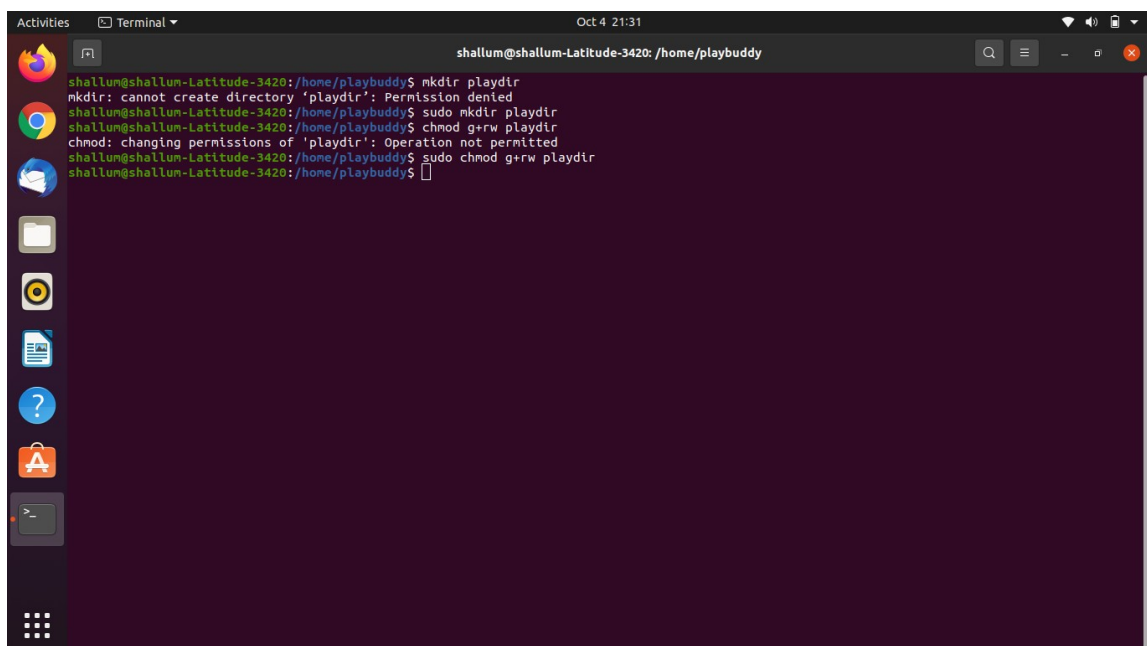
```
shallum@shallum-Latitude-3420: ~  
$ groups  
shallum adm cdrom sudo dip plugdev lpadmin sambashare  
$ sudo groupadd playgroup  
$ sudo usermod -a -G playgroup playbuddy  
$
```

The terminal window is part of a desktop environment with a sidebar on the left containing icons for Firefox, Chrome, and other applications. The terminal output shows that the 'playgroup' group was successfully created and 'playbuddy' was added to it.

Q.5 Create a directory called playdir.

-> Commands I have used:

- `sudo mkdir playdir`
- `ls`



A terminal window titled "Terminal" with a dark purple background. The window shows a series of commands and their outputs. The user is in the directory `/home/playbuddy`. The commands and outputs are as follows:

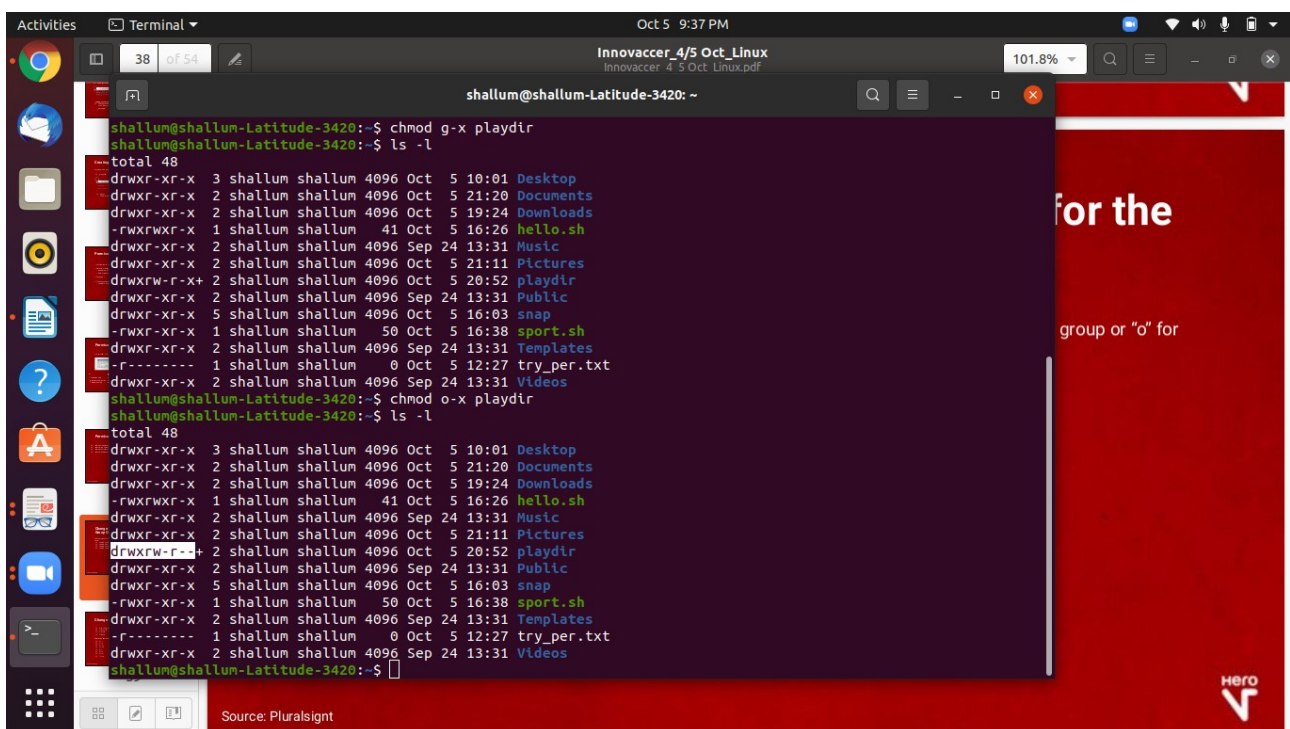
```
shallum@shallum-Latitude-3420:/home/playbuddy$ mkdir playdir
mkdir: cannot create directory 'playdir': Permission denied
shallum@shallum-Latitude-3420:/home/playbuddy$ sudo mkdir playdir
shallum@shallum-Latitude-3420:/home/playbuddy$ chmod g+r playdir
chmod: changing permissions of 'playdir': Operation not permitted
shallum@shallum-Latitude-3420:/home/playbuddy$ sudo chmod g+r playdir
shallum@shallum-Latitude-3420:/home/playbuddy$
```

The terminal window has a standard Ubuntu-style top bar with "Activities", "Terminal", and the date/time "Oct 4 21:31". On the left side, there is a vertical dock with icons for the Dash, Home, Files, Firefox, Google Chrome, and the Dash icon. The terminal output shows that the user attempted to create a directory named 'playdir' but was denied permission. They then tried to use 'sudo' to create the directory, but the output is not visible. Finally, they tried to change permissions with 'chmod' and 'sudo chmod', but both failed with the message "Operation not permitted".

Q.6 Change permissions of playdir such that playbuddy can read and write into it but bestbuddy can only read from it

-> Commands I have used:

- sudo groupadd groupplay
- sudo usermod -a -G groupplay playbuddy
- chmod g-x playdir
- chmod o-x playdir



The screenshot shows a terminal window titled "Innovaccer_4/5 Oct Linux" with the user "shallum@shallum-Latitude-3420". The terminal displays the following commands and their outputs:

```
shallum@shallum-Latitude-3420:~$ chmod g-x playdir
shallum@shallum-Latitude-3420:~$ ls -l
total 48
drwxr-xr-x 3 shallum shallum 4096 Oct 5 10:01 Desktop
drwxr-xr-x 2 shallum shallum 4096 Oct 5 21:20 Documents
drwxr-xr-x 2 shallum shallum 4096 Oct 5 19:24 Downloads
-rwxrwxr-x 1 shallum shallum 41 Oct 5 16:26 hello.sh
drwxr-xr-x 2 shallum shallum 4096 Sep 24 13:31 Music
drwxr-xr-x 2 shallum shallum 4096 Oct 5 21:11 Pictures
drwxrwxr-x+ 2 shallum shallum 4096 Oct 5 20:52 playdir
drwxr-xr-x 2 shallum shallum 4096 Sep 24 13:31 Public
drwxr-xr-x 5 shallum shallum 4096 Oct 5 16:03 snap
-rwxr-xr-x 1 shallum shallum 50 Oct 5 16:38 sport.sh
drwxr-xr-x 2 shallum shallum 4096 Sep 24 13:31 Templates
-r----- 1 shallum shallum 0 Oct 5 12:27 try_per.txt
drwxr-xr-x 2 shallum shallum 4096 Sep 24 13:31 Videos
shallum@shallum-Latitude-3420:~$ chmod o-x playdir
shallum@shallum-Latitude-3420:~$ ls -l
total 48
drwxr-xr-x 3 shallum shallum 4096 Oct 5 10:01 Desktop
drwxr-xr-x 2 shallum shallum 4096 Oct 5 21:20 Documents
drwxr-xr-x 2 shallum shallum 4096 Oct 5 19:24 Downloads
-rwxrwxr-x 1 shallum shallum 41 Oct 5 16:26 hello.sh
drwxr-xr-x 2 shallum shallum 4096 Sep 24 13:31 Music
drwxr-xr-x 2 shallum shallum 4096 Oct 5 21:11 Pictures
drwxrwxr-x+ 2 shallum shallum 4096 Oct 5 20:52 playdir
drwxr-xr-x 2 shallum shallum 4096 Sep 24 13:31 Public
drwxr-xr-x 5 shallum shallum 4096 Oct 5 16:03 snap
-rwxr-xr-x 1 shallum shallum 50 Oct 5 16:38 sport.sh
drwxr-xr-x 2 shallum shallum 4096 Sep 24 13:31 Templates
-r----- 1 shallum shallum 0 Oct 5 12:27 try_per.txt
drwxr-xr-x 2 shallum shallum 4096 Sep 24 13:31 Videos
shallum@shallum-Latitude-3420:~$
```

The terminal window is overlaid on a desktop background featuring a red banner with the text "for the" and "group or 'o' for". The desktop also shows a sidebar with various application icons and a top status bar with system information.