

Họ và tên : Trần Đình Khang

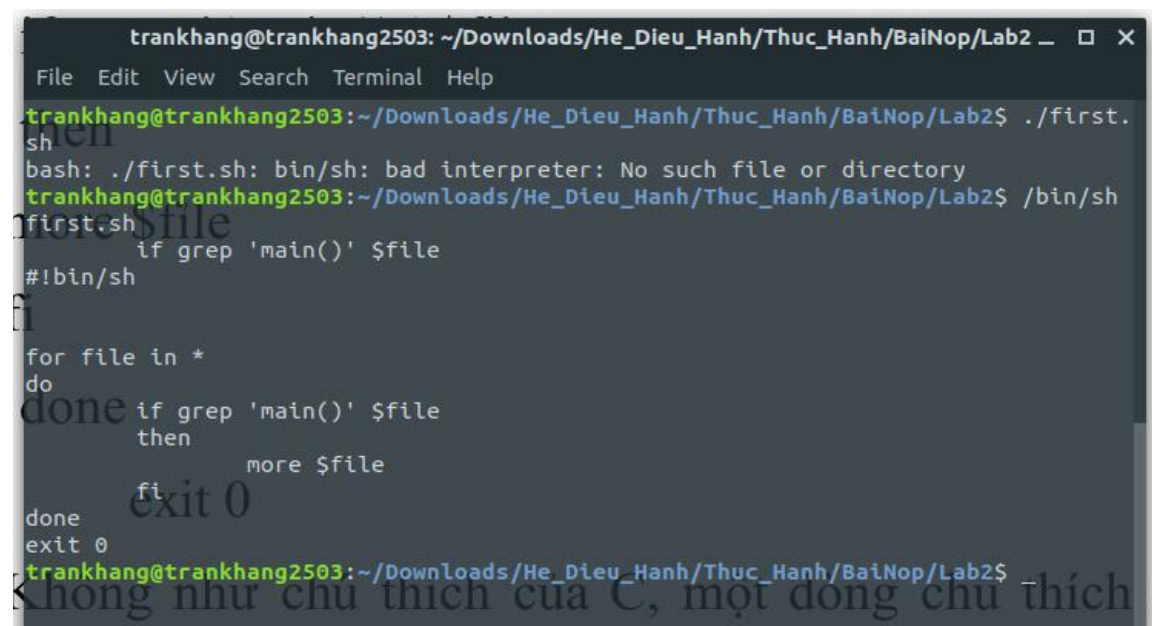
MSSV: 18520072

Mã Lớp: IT007.K21.KHTN

Bài thực hành Lab02

Bài 1:

2.4.2. Điều khiển shell bằng tập tin kịch bản (script file)



```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _ □ ×
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./first.sh
bash: ./first.sh: bin/sh: bad interpreter: No such file or directory
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ /bin/sh
first.sh
if grep 'main()' $file
#!bin/sh

for file in *
do
done if grep 'main()' $file
then
more $file
fi
done
exit 0
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$
```

2.4.2.1 Sử dụng biến



```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _ □ ×
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ echo $xin
nchao
Hello
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ xinchao="
I am here"
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ echo $xin
nchao
I am here
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ xinchao=
12+1
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ echo $xin
nchao
Hello $yourname
12+1
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ read you
rname
XYZ
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ echo "He
llo "$yourname
Hello XYZ
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _
```

Ví dụ 2-1: variables.sh

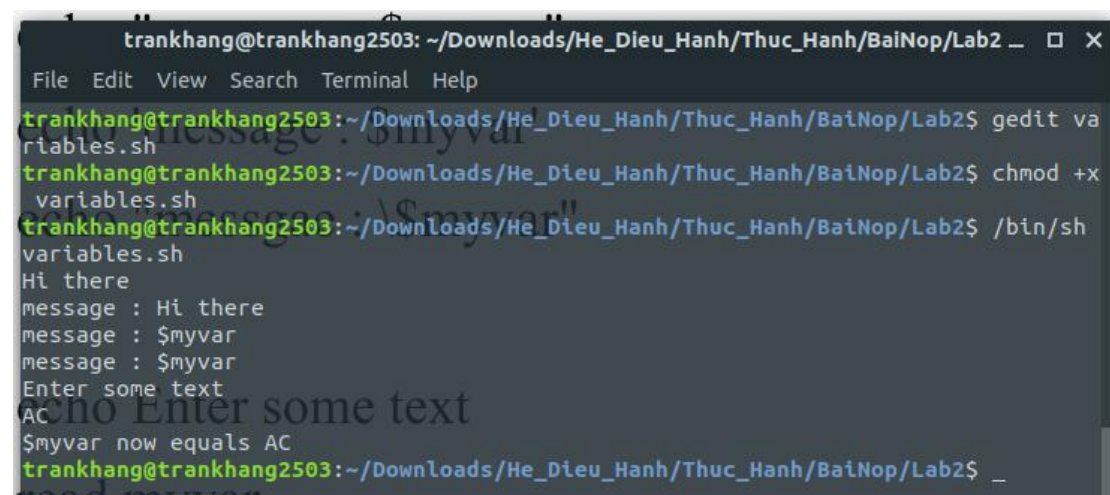


The screenshot shows a text editor window titled "Text Editor" with a dark theme. The file being edited is "variables.sh" located at "~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2". The code in the file is as follows:

```
#!/bin/sh

myvar="Hi there"
echo $myvar
echo "message : $myvar"
echo 'message : $myvar'
echo "message : /$myvar"

echo Enter some text
read myvar
echo '$myvar' now equals $myvar
```



The screenshot shows a terminal window with the title bar "trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2". The terminal shows the following commands and output:

```
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ gedit variables.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ chmod +x variables.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ /bin/sh variables.sh
Hi there
message : Hi there
message : $myvar
message : $myvar
Enter some text
$myvar now equals AC
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$
```

Ví dụ 2-2: try_variables.sh

```

trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ chmod +x
try_variables.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ /bin/sh
try_variables.sh 1 2 3
Hello
The program try_variables.sh now running
The second parameter was 2
The first parameter was 1
The parameter list was 1 2 3
The user's home directory is /home/trankhang
Please enter a new greeting
Hello
Hello
The script is now complete
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _

```

Ví dụ 2-3: if_control.sh

```

trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ gedit if
_control.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ chmod +x
if_control.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./if_con
trol.sh
Is it morning? Please answer yes or no
yes
Good morning
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _

```

Ví dụ 2-4: elif_control.sh

```

trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ chmod +x
elif_control.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./elif_c
ontrol.sh
Is it morning? Please answer yes or no
no
Good afternoon
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./elif_c
ontrol.sh
Is it morning? Please answer yes or no
yes
Good morning
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./elif_c
ontrol.sh
Is it morning? Please answer yes or no
ok
Sorry, ok not recognized. Enter yes or no
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _

```


Ví dụ 2-5: elif_control2.sh

```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _ □ ×
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ chmod +x elif_control2.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./elif_control2.sh
Is it morning? Please answer yes or no
Sorry, not recognized. Enter yes or no
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _
```

Ví dụ 2-6: for_loop.sh

```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _ □ ×
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ gedit for_loop.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ chmod +x for_loop.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./for_loop.sh
bar
fud
13
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _
```

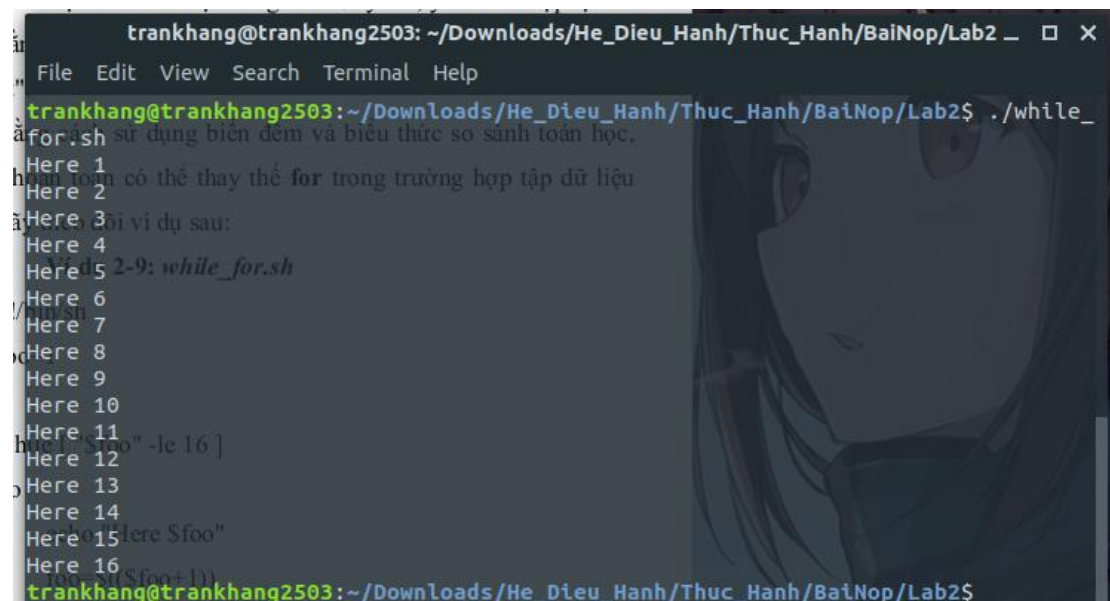
Ví dụ 2-7: for_loop2.sh

```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _ □ ×
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./for_loop2.sh
first.sh
for_loop2.sh
for_loop.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _
```

Ví dụ 2-8: password.sh

```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _ □ ×
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ gedit password.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./password.sh
Enter password
khang
Sorry, try again
secret, try again"
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _
```

Ví dụ 2-9: while_for.sh



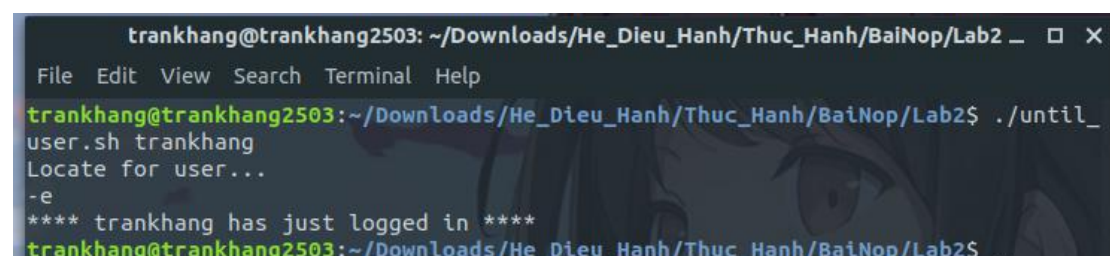
```

trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2
File Edit View Search Terminal Help

trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./while_for.sh
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$

```

Ví dụ 2-10: until_user.sh



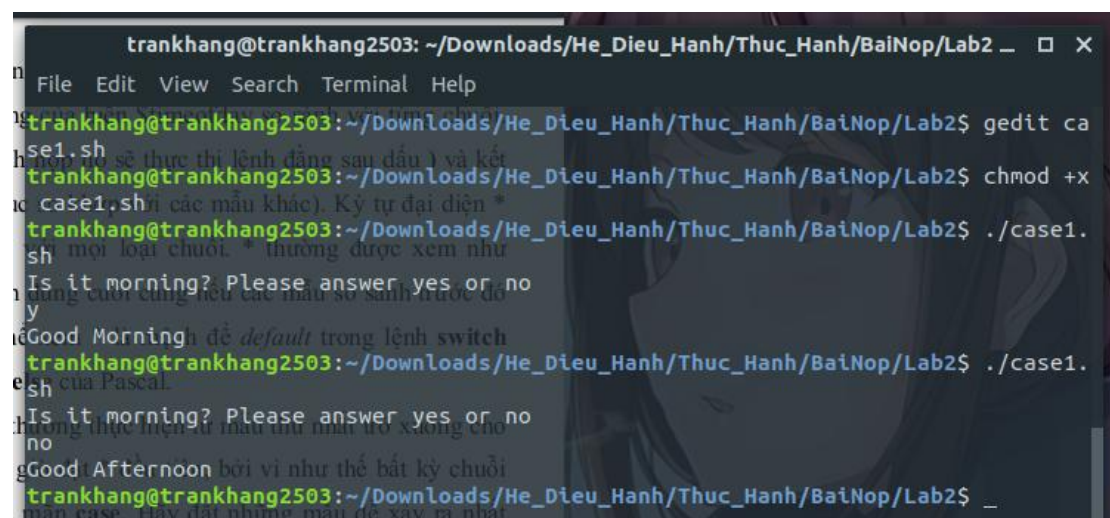
```

trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2
File Edit View Search Terminal Help

trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./until_user.sh
Locate for user...
-e
**** trankhang has just logged in ****
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$

```

Ví dụ 2-11: case1.sh



```

trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2
File Edit View Search Terminal Help

trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ gedit case1.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ chmod +x case1.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./case1.sh
Is it morning? Please answer yes or no
Good Morning
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./case1.sh
Is it morning? Please answer yes or no
Good Afternoon
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$

```

Ví dụ 2-12: case2.sh

```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./case2.sh
Is it morning? Please answer yes or no
ys
Sorry, answer not recognised
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./case2.sh
Is it morning? Please answer yes or no
Yes
Good Morning
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./case2.sh
Is it morning? Please answer yes or no
No
Good Afternoon
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$
```

Ví dụ 2-13: case3.sh

```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./case3.sh
Good Morning
Is it morning? Please answer yes or no
yes bright and early this morning?
Good Morning
Up bright and early this morning
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./case3.sh
Is it morning? Please answer yes or no
no
Good Afternoon
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./case3.sh
Is it morning? Please answer yes or no
oke
Sorry, answer not recognised
Please answer yes or no
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$
```

Bài 2 : Viết chương trình cho phép nhập vào tên và mssv. Kiểm tra nếu mssv đó không trùng với mình thì bắt nhập lại. In ra màn hình kết quả.


```
Open ▾ + password_2.sh ~Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 Save ⋮ _ □ ×
#!/bin/sh

echo "Enter your name"
read Name

echo "Enter your ID"
read mssv

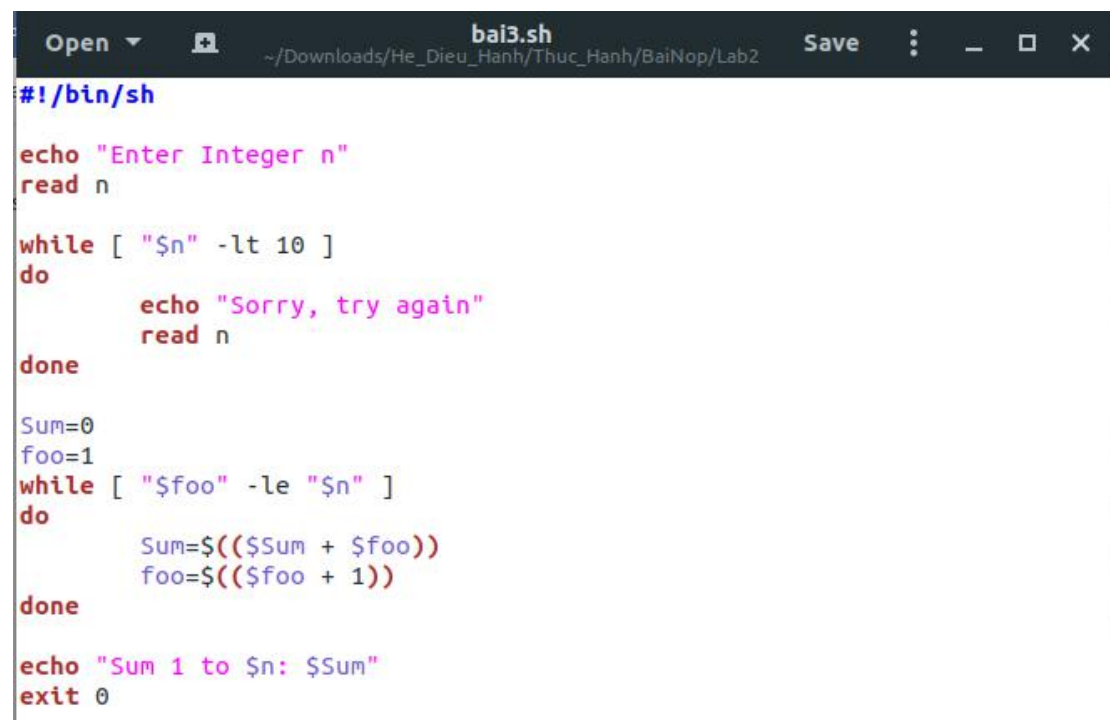
while [ "$mssv" != "18520072" ]; do
    echo "This is not $Name's ID"
    echo "Please, try again"
    read mssv
done

echo "Wellcome!!!"
exit 0
```

Excute:

```
trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2 _ □ ×
File Edit View Search Terminal Help
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ gedit password_2.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./password_2.sh
Enter your name
Tran Dinh Khang
Enter your ID
18520012
This is not Tran Dinh Khang's ID
Please, try enter your ID again!!!
1234
This is not Tran Dinh Khang's ID
Please, try enter your ID again!!!
18520072
Wellcome!!!
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ _
```

Bài 3: Viết chương trình cho phép nhập vào một số n. Kiểm tra nếu $n < 10$ thì bắt nhập lại. Tính tổng các số từ 1 đến n. In kết quả ra màn hình.



```

#!/bin/sh

echo "Enter Integer n"
read n

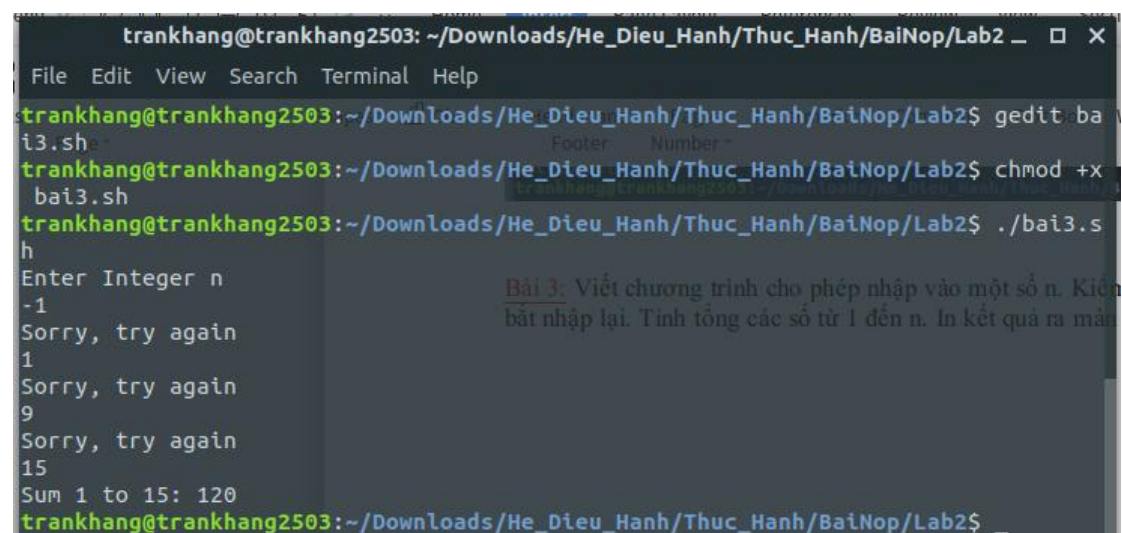
while [ "$n" -lt 10 ]
do
    echo "Sorry, try again"
    read n
done

Sum=0
foo=1
while [ "$foo" -le "$n" ]
do
    Sum=$((Sum + $foo))
    foo=$((foo + 1))
done

echo "Sum 1 to $n: $Sum"
exit 0

```

Excute:



```

trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2
File Edit View Search Terminal Help

trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ gedit bai3.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ chmod +x bai3.sh
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./bai3.sh
Enter Integer n
-1
Sorry, try again
1
Sorry, try again
9
Sorry, try again
15
Sum 1 to 15: 120
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$

```

Bài 4: Viết chương trình cho phép nhập vào một chuỗi. Kiểm tra chuỗi đó có tồn tại trong một file text (ví dụ test.txt) cùng thư mục hay không.


```

Open ▾  +  bai4.sh  Save  ▸  ▢  ✕
~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2

#!/bin/sh

echo "Enter pattern"
read pattern

flat=0
for file in $(ls *.txt)
do
    if grep -i -l "$pattern" $file
    then
        flat=1
    fi
done

if [ "$flat" = "0" ]
then
    echo "Can not find file!"
fi

exit 0

```

Excute:

```

trankhang@trankhang2503: ~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2
File Edit View Search Terminal Help

trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./bai4.s
h
Enter pattern
khanh
Can not find file!
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ ./bai4.s
h
Enter pattern
khang
abc.txt
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$ cat abc.
txt
Tran Dinh Khang
Khang
Pham Le Quang Nhat
Team
trankhang@trankhang2503:~/Downloads/He_Dieu_Hanh/Thuc_Hanh/BaiNop/Lab2$

```