Lab 10 Tasks

Operating System

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Batch: BSCS-5th semester

Lab Instructor:

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Lab Tasks:

Exercise 1:

Put this code in a file and executes with two arguments.

echo “The following is the output of $0 script:”
echo “The total number of command line argument:$#”
echo “The first parameter:$1”
echo “The second parameter:$2”

```
#!/bin/bash
echo "The following is the output of $0 script:"
echo "The total number of command line argument:$#"
echo "The first parameter is:$1"
echo "The Second parameter is:$2"
~
```

```
~
"Task.sh" [New] 6L, 181B written
[root@localhost ~]# chmod 777 Task.sh
```

```
[root@localhost ~]# ./Task.sh argument1 argument2
The following is the output of ./Task.sh script:
The total number of command line argument:2
The first parameter is:argument1
The Second parameter is:argument2
[root@localhost ~]#
```

Exercise 2:

Write a program to take value from user between 1 to 5.and display result like this:

1. …you pressed 1
2. …you pressed 2

Above 5….invalid

```
#!/bin/bash
echo "Please enter a number between 1and 5:"
read number
case $number in
1) echo "...you pressed 1";;
2) echo "...you pressed 2";;
3) echo "...you pressed 3";;
4) echo "...you pressed 4";;
5) echo "...you pressed 5";;
*) echo "Above 5... invalid";;
esac
```

```
"Task2.sh" [New] 11L, 266B written
[root@localhost ~]# chmod 777 Task2.sh
[root@localhost ~]# ./Task2.sh
Please enter a number between 1and 5:
6
Above 5... invalid
```

Exercise 3:

There are three semesters in an academic year i.e. Fall (Aug-Jan), Spring (Feb-May) and Summer (Jun-July). Write a script which read current month from the user and determine running semester. For example if user enters current month either 1 or January or Jan the script should display “Fall Semester”.

```
#!/bin/bash
echo "Please Enter the current month (e.g 1, January, Jan):"
read month
#conver input to lowercase for easy matching
month=$(echo "$month" | tr '[:upper:]' '[:lower:]')
case $month in
1|jan|january|8|aug|august|9|sep|september|10|oct|october|11|nov|november|12|dec
|december)
echo "Fall Semester";;
2|feb|february|3|mar|march|4|apr|april|5|may)
echo "Spring Semester";;
6|jun|june|7|jul|july)
echo "Summer Semester";;
*) echo "Invalid Output. Please Enter a Valid month";;
esac
~
```

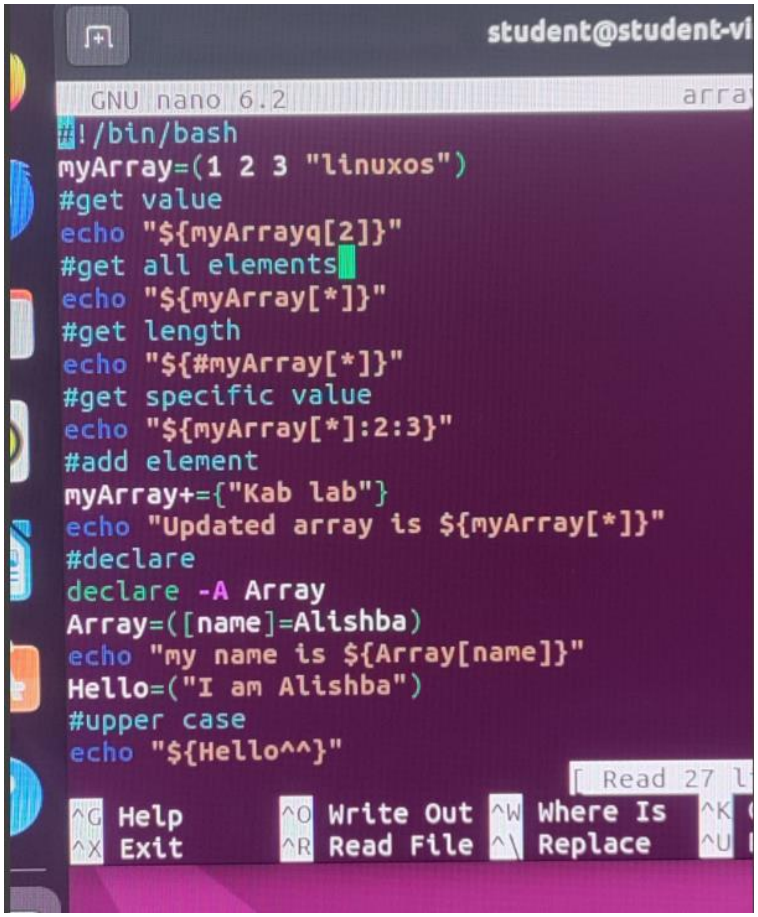
```
"semester.sh" [New] 14L, 490B written
[root@localhost ~]# chmod 777 semester.sh
[root@localhost ~]# ./semester.sh
Please Enter the current month (e.g 1, January, Jan):
oct
Fall Semester
```

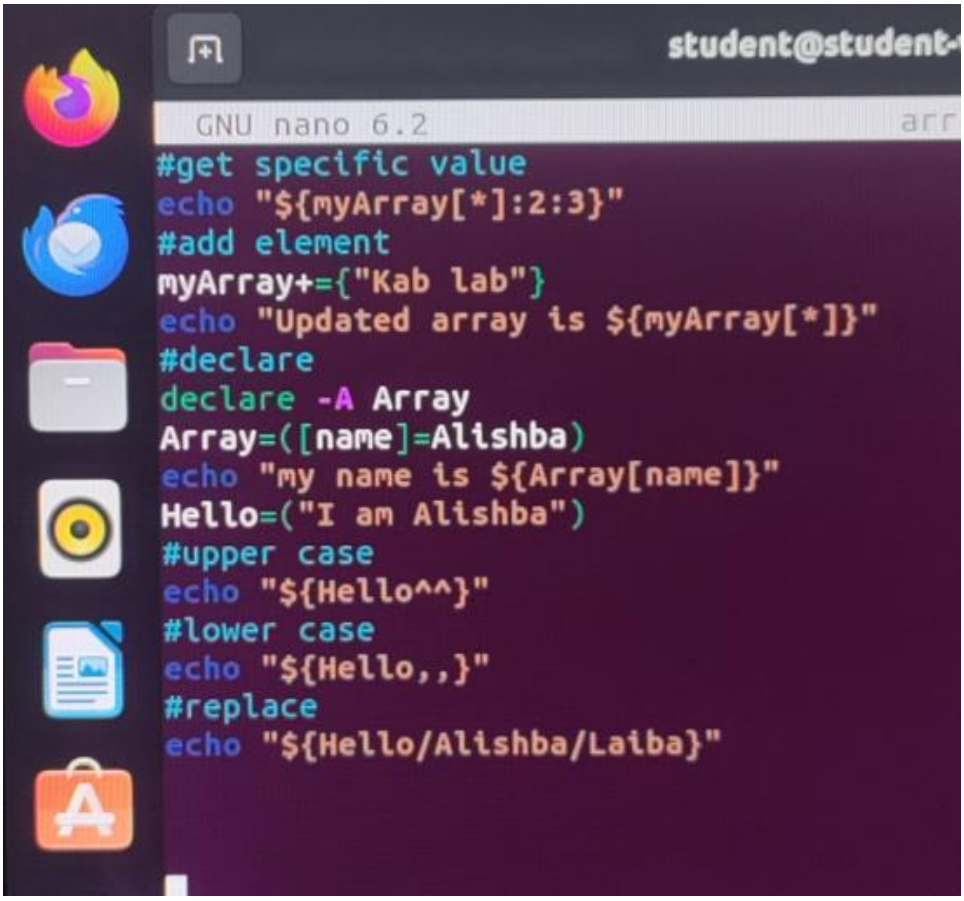
Exercise 4:

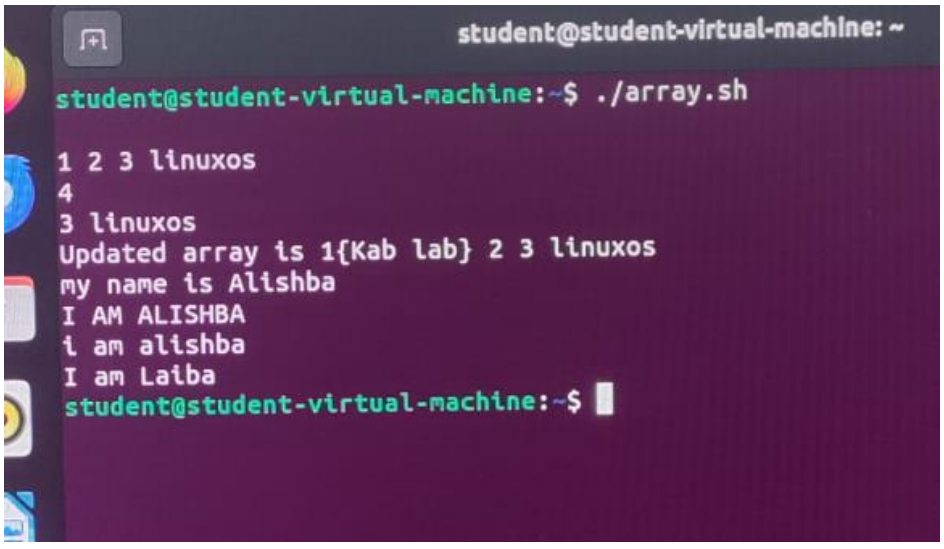
Write a program in shell scripting and attached screenshots with explanations

1. Perform array and string code in shell scripting
2. Perform If Else code in Shell Scripting
3. Perform Case related code in shell scripting
   Hhhhh

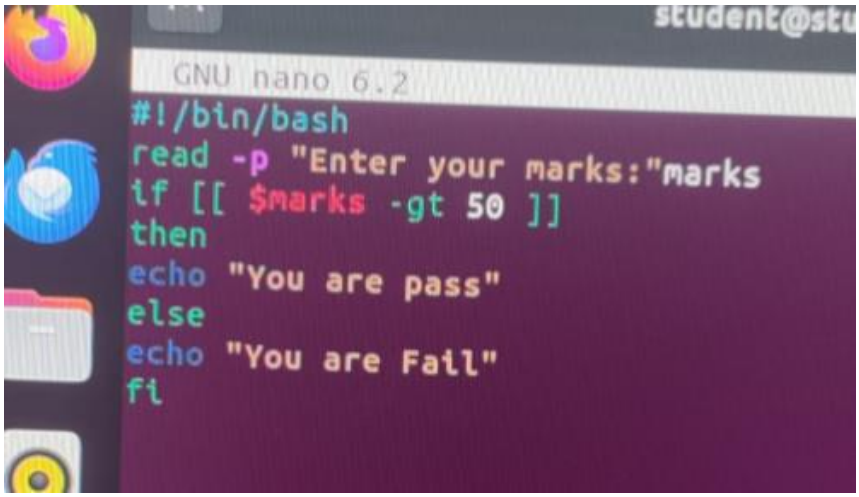
Array Code/ String :




student@student-
GNU nano 6.2
#get specific value
echo "${myArray[*]:2:3}"
#add element
myArray+={"Kab lab"}
echo "Updated array is ${myArray[*]}"
#declare
declare -A Array
Array=([name]=Alishba)
echo "my name is ${Array[name]}"
Hello=("I am Alishba")
#upper case
echo "${Hello^^}"
#lower case
echo "${Hello,,}"
#replace
echo "${Hello/Alishba/Laiba}"

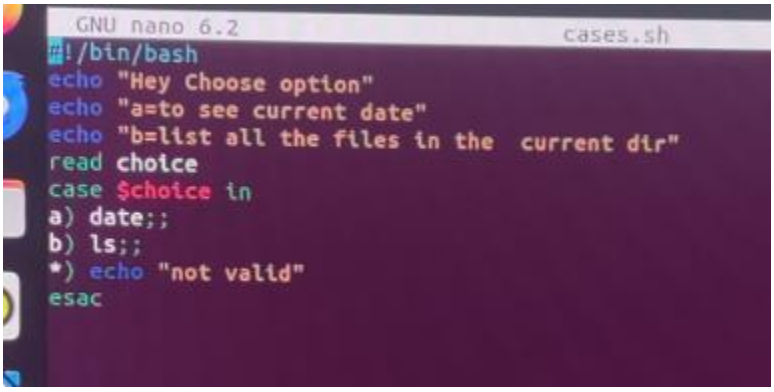

student@student-virtual-machine: ~
student@student-virtual-machine:~$ ./array.sh
1 2 3 linuxos
4
3 linuxos
Updated array is 1{Kab lab} 2 3 linuxos
my name is Alishba
I AM ALISHBA
i am alishba
I am Laiba
student@student-virtual-machine:~$

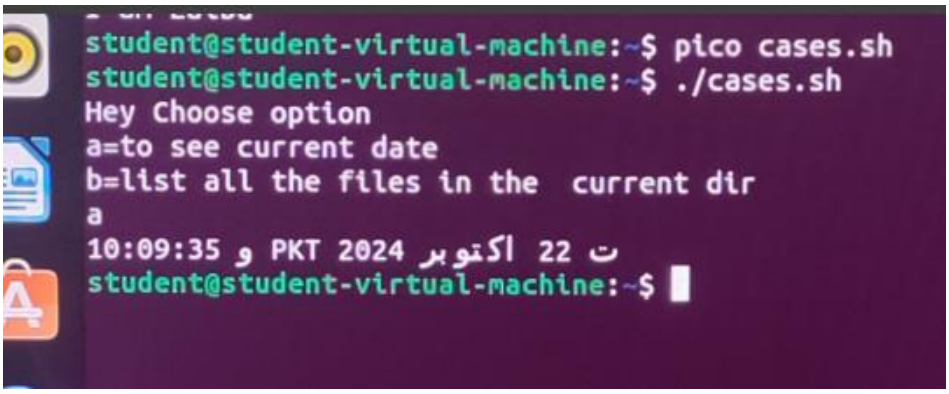
IF-ELSE-Code




```
b=list all the files in the  current dir
a
student@student-virtual-machine:~$ ./ifelse.sh
Enter your marks:marks 30
Ypu are Fail
student@student-virtual-machine:~$ pico ifelse.sh
student@student-virtual-machine:~$ ./ifelse.sh
Enter your marks:marks 30
You are Fail
student@student-virtual-machine:~$
```

Cases:




student@student-virtual-machine:~$ pico cases.sh
student@student-virtual-machine:~$ ./cases.sh
Hey Choose option
a=to see current date
b=list all the files in the current dir
a
10:09:35 و PKT 2024 اكتوبر 22 ت
student@student-virtual-machine:~$