Assignment Sheet

Assignment 1:- How to upload HTML web pages on the Apache2 web server in the EC-2 Instance? Please justify with step-by-step answers.

Solution: On the Ubuntu server installed EC2 instance we can run the following commands:

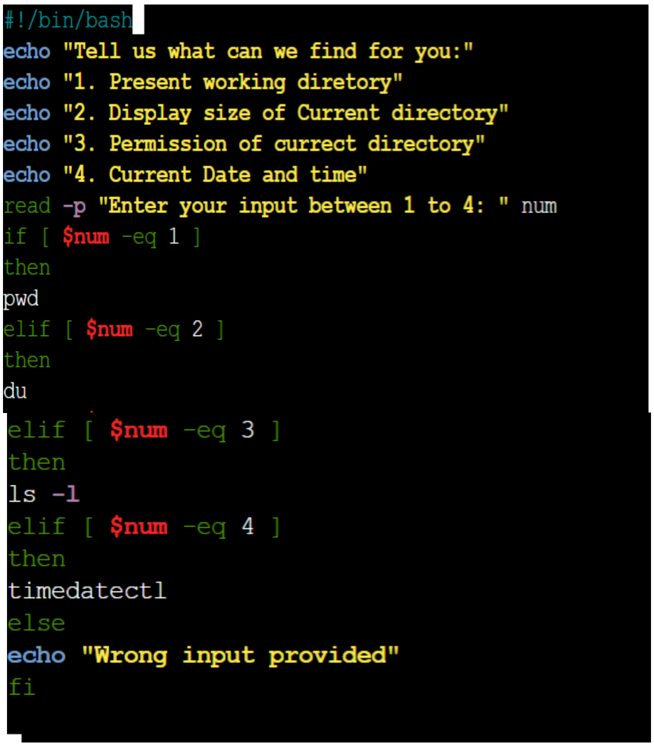
- Ubuntu server update – sudo apt update
- Install apache2 – sudo apt install apache2

Reference article: https://www.digitalocean.com/community/tutorials/how-to-install-the-apache-web-server-on-ubuntu-22-04

Assignment 2: Create readfile.sh in which you can read the information of PWD like size, permission, date time etc.

Solution:

```
#!/bin/bash
echo "Tell us what can we find for you:"
echo "1. Present working diretory"
echo "2. Display size of Current directory"
echo "3. Permission of currect directory"
echo "4. Current Date and time"
read -p "Enter your input between 1 to 4: " num
if [ $num -eq 1 ]
then
pwd
elif [ $num -eq 2 ]
then
du
elif [ $num -eq 3 ]
then
ls -l
elif [ $num -eq 4 ]
then
timedatectl
else
echo "Wrong input provided"
fi
```



```
#!/bin/bash
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echo "1. Present working diretory"
echo "2. Display size of Current directory"
echo "3. Permission of currect directory"
echo "4. Current Date and time"
read -p "Enter your input between 1 to 4: " num
if [ $num -eq 1 ]
then
pwd
elif [ $num -eq 2 ]
then
du
elif [ $num -eq 3 ]
then
ls -l
elif [ $num -eq 4 ]
then
timedatectl
else
echo "Wrong input provided"
fi
```
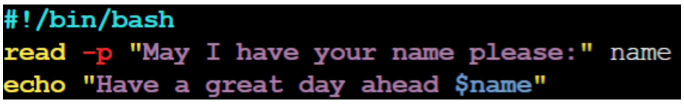
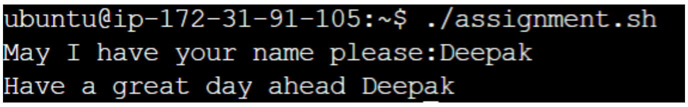

Assignment 3: Take input of name from the user and print Have a great day ahead {name}

Solution:



```
#!/bin/bash
read -p "May I have your name please:" name
echo "Have a great day ahead $name"
```

Output



```
ubuntu@ip-172-31-91-105:~$ ./assignment.sh
May I have your name please:Deepak
Have a great day ahead Deepak
```

Assignment 4: Let’s take a scenario of a fintech app program in which we want to have three separate outputs for 3 different situations:

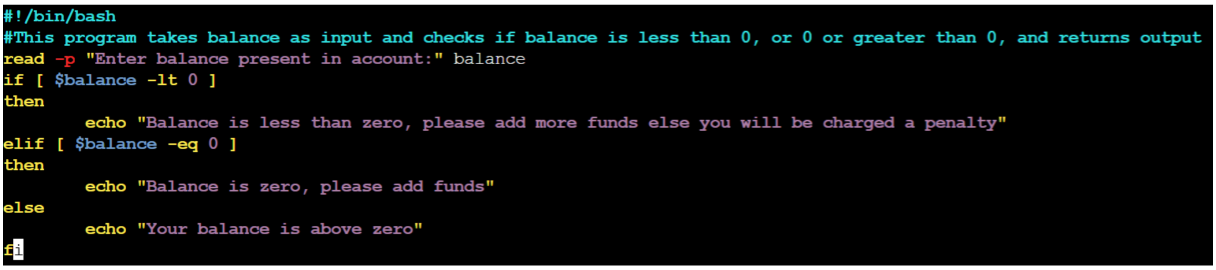
→The balance is less than zero
→The balance is zero
➔ The balance is above zero

For instance, in the following program, use the if, elif, and else statements to display different outputs in different scenarios:

Use the “if” condition to check if the balance is less than zero. If this condition evaluates to true, display the message using the echo command: “Balance is less than zero, please add more funds else you will be charged a penalty”.

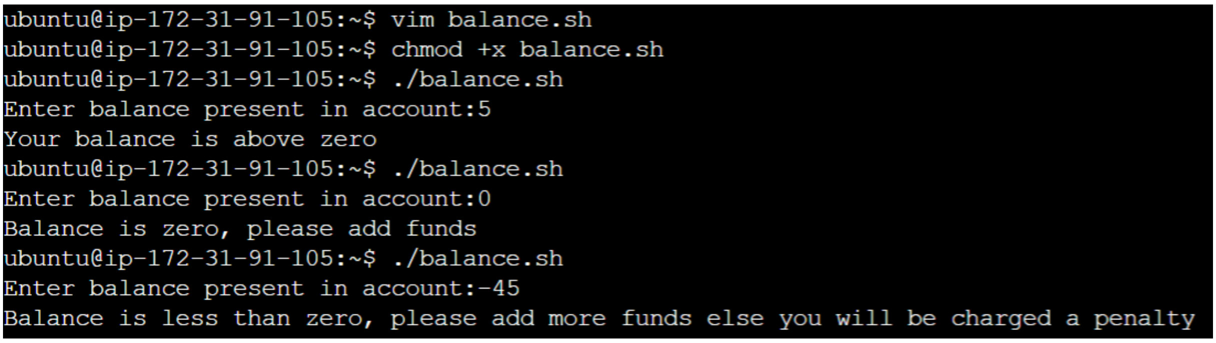
If the above condition does not match, then use the “elif” condition to check if the balance is equal to zero. If it evaluates to true, display the message: “Balance is zero, please add funds”

If none of the above conditions matches, use the “else” condition to display the: Your balance is above zero.
Solution: Created file by name balance.sh



```
#!/bin/bash
#This program takes balance as input and checks if balance is less than 0, or 0 or greater than 0, and returns output
read -p "Enter balance present in account:" balance
if [ $balance -lt 0 ]
then
        echo "Balance is less than zero, please add more funds else you will be charged a penalty"
elif [ $balance -eq 0 ]
then
        echo "Balance is zero, please add funds"
else
        echo "Your balance is above zero"
fi
```

Output:

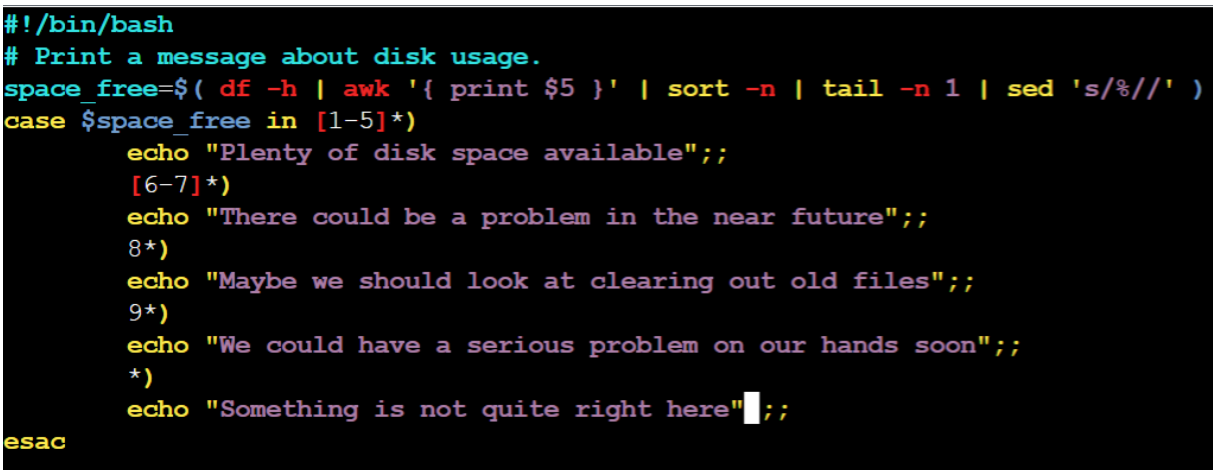


```
ubuntu@ip-172-31-91-105:~$ vim balance.sh
ubuntu@ip-172-31-91-105:~$ chmod +x balance.sh
ubuntu@ip-172-31-91-105:~$ ./balance.sh
Enter balance present in account:5
Your balance is above zero
ubuntu@ip-172-31-91-105:~$ ./balance.sh
Enter balance present in account:0
Balance is zero, please add funds
ubuntu@ip-172-31-91-105:~$ ./balance.sh
Enter balance present in account:-45
Balance is less than zero, please add more funds else you will be charged a penalty
```

Assignment 5: Debug and define briefly the following program:-

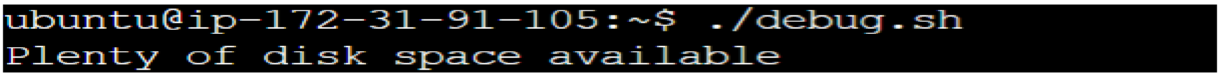
```
#!/bin/bash

# Print a message about disk usage.

space_free=$( df -h | awk '{ print $5 }' | sort -n | tail -n 1 | sed 's/%//' )

case $space_free in [1-5]*) echo Plenty of disk space available

[6-7]*) echo There could be a problem in the

near future

8*) echo Maybe we should look at clearing out old

files

9*) echo We could have a serious problem on our hands

soon

*)

echo Something is not quite right here ;;

esac
```

Solution:



```
#!/bin/bash
# Print a message about disk usage.
space_free=$( df -h | awk '{ print $5 }' | sort -n | tail -n 1 | sed 's/%//' )
case $space_free in [1-5]*)
        echo "Plenty of disk space available";;
        [6-7]*)
        echo "There could be a problem in the near future";;
        8*)
        echo "Maybe we should look at clearing out old files";;
        9*)
        echo "We could have a serious problem on our hands soon";;
        *)
        echo "Something is not quite right here";;
esac
```

Output:



```
ubuntu@ip-172-31-91-105:~$ ./debug.sh
Plenty of disk space available
```