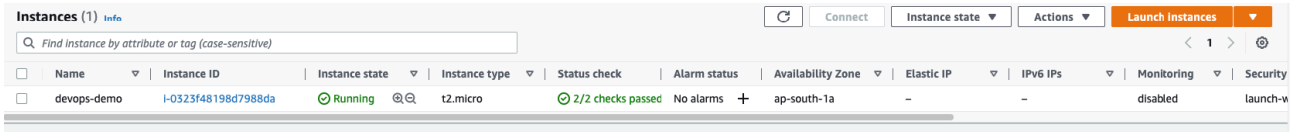
Assignment Sheet

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

1. Launch EC2 Instance



2. Login into the instance via ssh

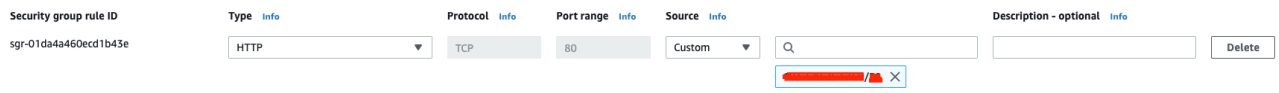
3. Switch to root user with command
   $ sudo su

4. Install apache2 package & start server
   $ sudo apt install apache2
   $ systemctl start apache2

5. Update index.html file

```
/home/ubuntu# echo "Hello from EC2 instance $(hostname -A)" > /var/www/html/index.html
```

6. Add inbound rule for security group to access the index.html content.



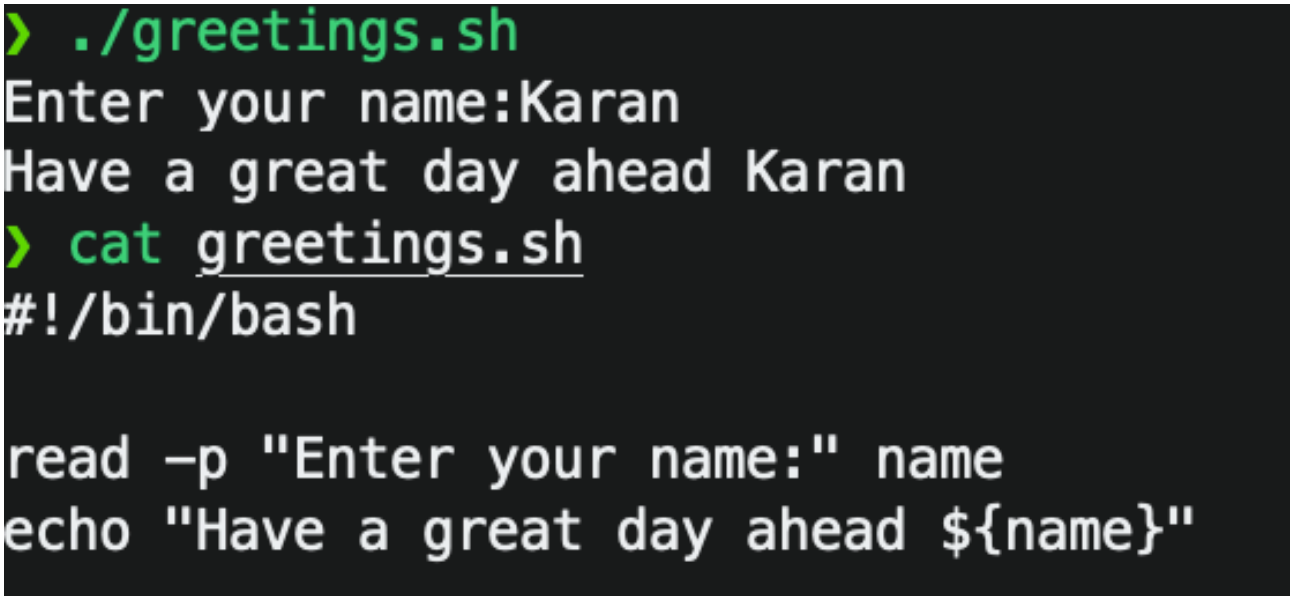
7. Go to public ip in web browser.

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

```
❯ ./readfile.sh
Size of PWD: 96B
Permission of PWD: drwxr-xr-x
Date of PWD: 22 Nov 2022
Time of PWD: 01:37:01
❯ cat ./readfile.sh
#!/bin/bash

size_of_current_directory=$(ls -lha|awk 'NR==2 { print $5 }')
echo "Size of PWD: $size_of_current_directory"
permission_of_current_directory=$(ls -lha|awk 'NR==2 {print $1}')
echo "Permission of PWD: $permission_of_current_directory"
year=$(ls -lhaT|awk 'NR==2 { print $9 }')
month=$(ls -lhaT|awk 'NR==2 { print $6 }')
day=$(ls -lhaT|awk 'NR==2 { print $7 }')
time=$(ls -lhaT|awk 'NR==2 { print $8 }')
echo "Date of PWD: $day $month $year"
echo "Time of PWD: $time"
```

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



Assignment 4 : Let's take a scenario of 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, else statements to display different outputs in

different scenarios:

Use "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 penalty".

If the above condition does not match, then use "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 condition matches, use the "else" condition to display the: Your balance is above zero.

```
❯ ./balance.sh 100
Balance is above zero!
❯ ./balance.sh 0
Balance is zero, please add funds
❯ ./balance.sh -1
Balance is less than zero, Please add more funds else you will be charged penalty
❯ cat balance.sh
#!/bin/bash

balance=$1

if [[ $balance -gt 0 ]]
then
echo "Balance is above zero!"
elif [[ $balance -lt 0 ]]
then
echo "Balance is less than zero, Please add more funds else you will be charged penalty"
else
echo "Balance is zero, please add funds"
fi
```

Assignment 5 : Debug and define briefly about

the following program :-

#!/bin/bash
Print a message about disk useage.

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

Error free program & output:

```
❯ cat test.sh
#!/bin/bash
# Print a message about disk useage.

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
❯ ./test.sh
Plenty of disk space available
```