Scripting Task

TASKS

Work Flow:

- Create an EC2 instance with the help of AWS Management Console with linux OS of required configuration.
- Now, Connect an EC2 instance with an help of Windows Terminal or Gitbash or Vbox.
- To connect an EC2 instance the command is:
  - ssh -i "**key_file**" ec2-user@"**Public_IP_address**"

Key_file --- Key file of the instance with the extension .pem

Public_IP_address --- Public IP address of the instance.

1. **Create a shell script to print the HTTP error code of guvi.in & print, the success/failure message based on the error code response**

   ✓ First To create an scripting file with .sh extension. The file name is "**check_guvi_status.sh**", the command is:
   - **touch check_guvi_status.sh**

   ✓ Now to open and write the script for to print the HTTP error code of guvi.in, the command is:
   - **vi check_guvi_status.sh**

   ✓ After running the above command blank page will show to insert an text into that file please press **"i"** to change the file into insert mod and write an script to print the HTTP error code of guvi.in , which as given below:

   ```bash
   #!/bin/bash

   URL="https://www.guvi.in"

   HTTP_STATUS=$(curl -o /dev/null -s -w "%{http_code}" "$URL")

   echo "HTTP Status Code: $HTTP_STATUS"

   if [[ $HTTP_STATUS -ge 200 && $HTTP_STATUS -lt 300 ]]; then
       echo "Success: The request to $URL was successful."
   else
       echo "Failure: The request to $URL failed with status code $HTTP_STATUS."
   fi
   ```

   ✓ After written a script press **"Esc"** to remove an insert mod and to save & close the script file, give **" :wq! "** and press Enter.

   ✓ Once the script is written run the script file before running the script file, get permission to run the script file , to get permission , the command is:
   - **chmod +x check_guvi_status.sh**

   ✓ Now to run the scripting file, the command is:
   - **./ check_guvi_status.sh**

Part of Script	Explanation
curl -o /dev/null -s -w "%{http_code}"	Sends a silent request and only prints the HTTP code
if [[$HTTP_CODE -ge 200 && $HTTP_CODE -lt 300]]	Checks if the code is in the success range (200–299)
echo	Prints the result message

✓ After running the script we got an result as success, Which as given below:
- **HTTP Status Code: 200**
  Success: The request to https://www.guvi.in was successful.

✓ Now, the HTTP error code of guvi.in is **200**, and we got an the **success** message based on the error code response.

```
       ,        #_
      ~\_   ####_         Amazon Linux 2023
     ~~  \_#####\
     ~~     \###|
     ~~       \#/  ___     https://aws.amazon.com/linux/amazon-linux-2023
      ~~       V~' '->
       ~~~         /
         ~~._.   _/
            _/ _/
          _/m/'
[ec2-user@ip-172-31-87-249 ~]$ touch check_guvi_status.sh
[ec2-user@ip-172-31-87-249 ~]$ vi check_guvi_status.sh
[ec2-user@ip-172-31-87-249 ~]$ chmod +x check_guvi_status.sh
[ec2-user@ip-172-31-87-249 ~]$ ./check_guvi_status.sh
HTTP Status Code: 200
 Success: The request to https://www.guvi.in was successful.
[ec2-user@ip-172-31-87-249 ~]$
```

2. **Given a file, replace all occurrence of the word "give" with "learning" from 5th line till the end in only those lines that contain the word "welcome"**

✓ First To create an normal text file with .txt extension. The file name is "**my_file.txt**", the command is:

- **touch my_file.txt**

✓ Now to open and write the some content to the file to achive our requirements, the command is:

- **vi my_file.txt**

✓ Once open the file write some text to achive our requirements, which as given as below:

```
This is line 1
This is line 2
This is line 3
This is line 4
welcome give and enjoy
this is just text
welcome all, we give great knowledge
no keyword here
welcome message to give
```

✓ Now create an scripting file with .sh extension. The file name is "**check_guvi_status.sh**", the command is:

- **touch replace_word.sh**

✓ Now to open and write the script to replace an word in the given file, the command is:
- **vi replace_word.sh**

✓ After running the above command blank page will show to insert an text into that file please press **"i"** to change the file into insert mod and write an script to replace an word in the given file, which as given below:

```
#!/bin/bash

FILE="my_file.txt"

cp "$FILE" "$FILE.bak"

awk 'NR<5 { print; next }
    /welcome/ { gsub(/give/, "learning") }
    { print }' "$FILE" > temp && mv temp "$FILE"

echo " Replacement completed in '$FILE'. Backup saved as '$FILE.bak'."

~
```

✓ After written a script press **"Esc"** to remove an insert mod and to save & close the script file, give " **:wq!** " and press Enter.

✓ Once the script is written run the script file. before running the script file, get permission to run the script file , to get permission , the command is:
- **chmod +x replace_word.sh**

✓ Now to run the scripting file, the command is:

- **./ replace_word.sh**

✓ After running the script we got an result as success and I also get an backup of an original file, Which as given below:

- **Replacement completed in 'my_file.txt'. Backup saved as 'my_file.txt.bak'.**

✓ Now to open and view the content of the file to verify were the word is replaced or not, the command is:

- **Cat my_file.txt**

Before:

After:

************** TASK COMPLETED **************