

Bash Scripting Assignment

Assignment Instructions

This assignment consists of basic bash scripting tasks introduced in Class 16. The objective is to demonstrate understanding of functions, conditionals, input handling, and error checking in bash scripts.

Task 1: Add Two Numbers Using a Function

Objective: Create a script with a function that adds two numbers.

Filename: sum.sh

Script:

```
#!/bin/bash
add() {
  read -p "Enter first number: " num1
  read -p "Enter second number: " num2
  sum=$((num1+num2))
  echo "Sum: $sum"
}

add
```

Explanation: This script defines a function called `add` that takes two inputs, adds them using arithmetic expansion, and prints the result.

Screenshot/Output:

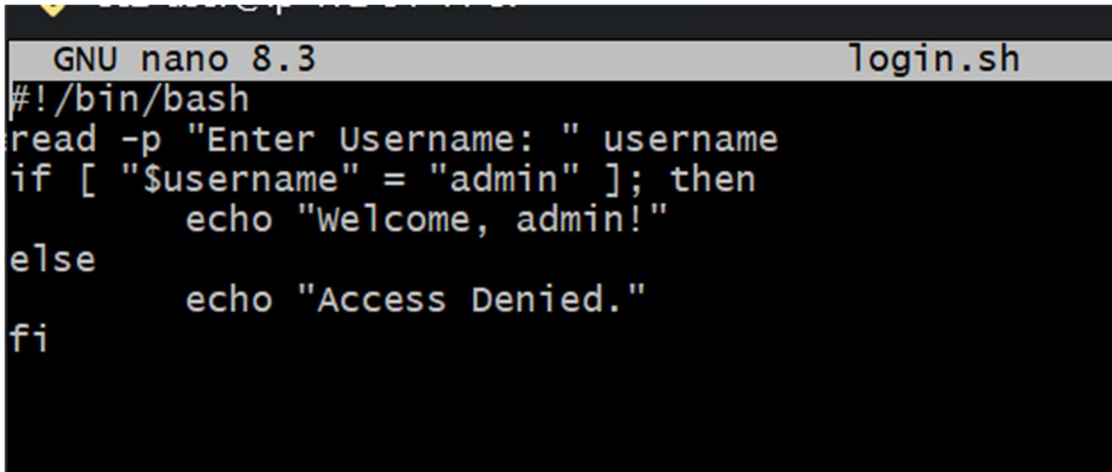
```
[ec2-user@ip-172-31-11-3 ~]$ nano sum.sh
[ec2-user@ip-172-31-11-3 ~]$ chmod +x sum.sh
[ec2-user@ip-172-31-11-3 ~]$ ./sum.sh
Enter first number: 10
Enter second number: 5
Sum: 15
```

Task 2: Login Script

Objective: Create a bash script that asks the user for a username and checks if it is 'admin'.

Filename: login.sh

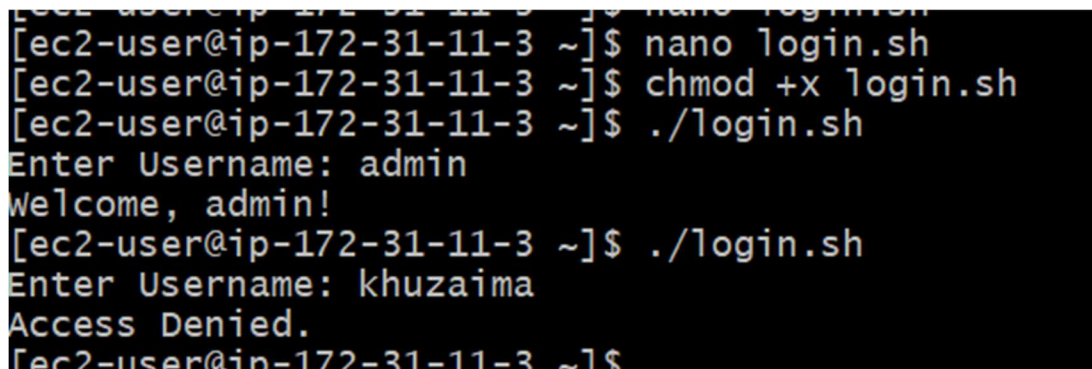
Script:

A screenshot of the GNU nano 8.3 text editor editing a file named login.sh. The editor's interface shows the filename 'login.sh' in the top right corner. The script content is as follows:

```
#!/bin/bash
read -p "Enter Username: " username
if [ "$username" = "admin" ]; then
    echo "Welcome, admin!"
else
    echo "Access Denied."
fi
```

Explanation: This script reads input from the user. If the input is 'admin', it prints a welcome message; otherwise, it denies access.

Screenshot/Output:

A screenshot of a terminal window showing the execution of the login.sh script. The user is at a prompt on an EC2 instance. The commands and their outputs are:

```
[ec2-user@ip-172-31-11-3 ~]$ nano login.sh
[ec2-user@ip-172-31-11-3 ~]$ chmod +x login.sh
[ec2-user@ip-172-31-11-3 ~]$ ./login.sh
Enter Username: admin
Welcome, admin!
[ec2-user@ip-172-31-11-3 ~]$ ./login.sh
Enter Username: khuzaima
Access Denied.
[ec2-user@ip-172-31-11-3 ~]$
```