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.
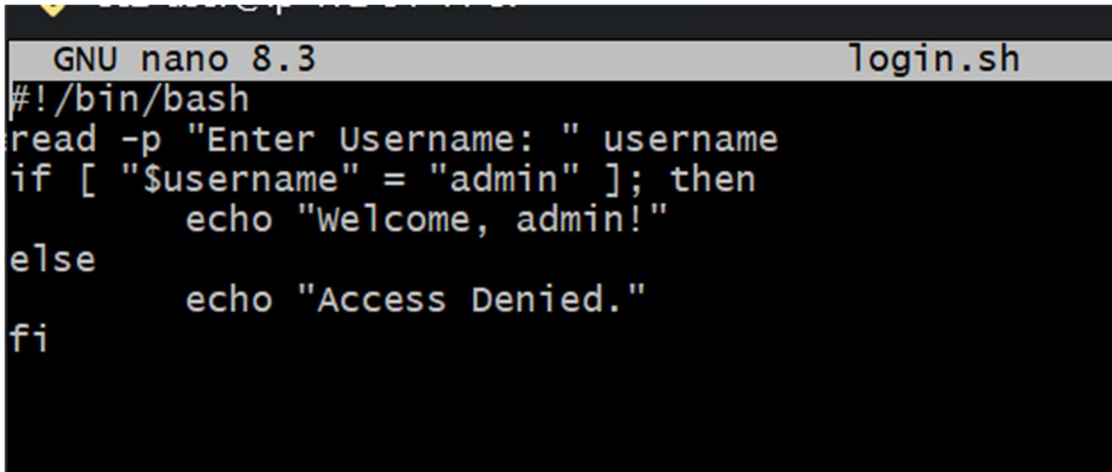
Screenshot/Output:

```
[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'.
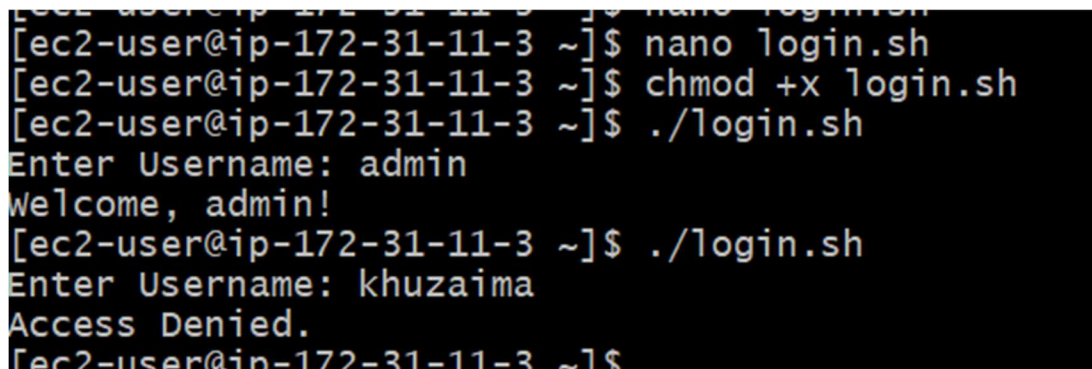
Filename: login.sh

Script:

```
GNU nano 8.3                                    login.sh
#!/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:

```
[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 ~]$
```