Experiment 05

Aim: if-else statement in bash

Bash scripting allows conditional execution using if-else statements. These statements enable decision-making within a script, executing different commands based on whether a condition evaluates to true or false.

1. Simple if statement
```
#!/bin/bash
if [ 1 -eq 1 ];
then
    echo "1 is equal to 1"
fi
```
Save as: testif.sh

```
localhost:~/Aatif# cat>testif1.sh
#!/bin/bash
if [ 1 -eq 1 ];
then
    echo "1 is equal to 1"
fi
```

2. if-else statement
```
#!/bin/bash
if [ 1 -eq 1 ];
then
    echo "1 is equal to 1"
else
    echo "The numbers are not equal"
fi
```
Saveas:testif2.sh
Execute using: bash testif2.sh

```
localhost:~/Aatif# cat>testif2.sh
#!/bin/bash
if [ 1 -eq 1 ];
then
    echo "1 is equal to 1"
else
    echo "The numbers are not equal"
fi

localhost:~/Aatif# bash testif2.sh
1
1 is equal to 1
```

3. Check if a file exists
```
#!/bin/bash
if [ -f data.txt ]
then
    echo "File exists"
else
    touch data.txt
    echo "New file created"
fi
```

```
localhost:~/Aatif# #!/bin/bash
localhost:~/Aatif# if [ -f data.txt ]
> then
>     echo "File exists"
> else
>     touch data.txt
>     echo "New file created"
> fi
New file created
```

4. String comparison

```
#!/bin/bash
user="admin"
if [ "$user" = "administrator" ];
then
    echo "The string matches"
else
    echo "The strings do not match"
fi
```

```
localhost:~/Aatif# #!/bin/bash
localhost:~/Aatif# user="admin"
localhost:~/Aatif# if [ "$user" = "administrator" ];
> then
>     echo "The string matches"
> else
>     echo "The strings do not match"
> fi
The strings do not match
```

5. Authentication check

```
#!/bin/bash
auth_users="admin"
read -p "What's your name? " user

if [[ "$user" == "$auth_users" ]];
then
    echo "You are an administrator"
elif [[ -z "$user" ]];
then
    echo "Please enter a username"
    read user
    echo "Hello $user, Greetings!"
else
    echo "You are a standard user"
fi
```

```
localhost:~/Aatif# #!/bin/bash
localhost:~/Aatif# auth_users="admin"
localhost:~/Aatif# read -p "What's your name? " user
What's your name? localhost:~/Aatif# if [[ "$user" == "$auth_users" ]];
> then
>     echo "You are an administrator"
> elif [[ -z "$user" ]];
> then
>     echo "Please enter a username"
>     read user
>     echo "Hello $user, Greetings!"
> else
>     echo "You are a standard user"
> fi
Please enter a username
Aatif
Hello Aatif, Greetings!
```