

Write programs using shell scripting covering data types, conditional, and looping and decision statements.

Title: Write programs using shell scripting covering data types, conditional, and looping and decision statements.

Description:

A shell script is a computer program designed to be run by the Unix/Linux shell which could be one of the following:

- The Bourne Shell
- The C Shell
- The Korn Shell
- The GNU Bourne-Again Shell

A shell is a command-line interpreter and typical operations performed by shell scripts include file manipulation, program execution, and printing text.

1. Basic Shell Scripting

Open editor and type below Code and save as test.sh

```
#!/bin/sh  
  
echo "What is your name?"  
  
read PERSON  
  
echo "Hello, $PERSON"
```

Output:

```
$/test.sh  
What is your name?  
Zara Ali  
Hello, Zara Ali  
$
```

2. Using Arrays

Open editor and type below Code and save as test1.sh

```
#!/bin/sh
NAME[0]="Zara"
NAME[1]="Qadir"
NAME[2]="Mahnaz"
NAME[3]="Ayan"
NAME[4]="Daisy"
echo "First Index: ${NAME[0]}"
echo "Second Index: ${NAME[1]}"
```

Output:

```
$/test1.sh
First Index: Zara
Second Index: Qadir
```

3. Using Decision Statement

Open editor and type below Code and save as test2.sh

```
#!/bin/sh
a=10
b=20
if [ $a == $b ]
then
    echo "a is equal to b"
elif [ $a -gt $b ]
then
    echo "a is greater than b"
elif [ $a -lt $b ]
```

then

echo "a is less than b"

else

echo "None of the condition met"

fi

Output:

```
$/test2.sh
```

```
a is less than b
```

4. Looping Statement

Open editor and type below Code and save as test3.sh

```
for var in 0 1 2 3 4 5 6 7 8 9
```

```
do
```

```
echo $var
```

```
done
```

Output:

```
$/test3.sh
```

```
0  
1  
2  
3  
4  
5  
6  
7  
8  
9
```

5. Result

We have successfully executed commands in Linux.