



SHELL PROGRAMMING LAB

ASSIGNMENT -7

SUBMITTED BY:

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EXPERIMENT – 9

TITLE: Shell Scripts implementing Control Structure

Activities:

1. Write a shell script that computes the gross salary of an employee according to the following rules: i) If basic salary is < 1500 then HRA = 10% of the basic and DA = 90% of the basic. ii) If basic salary is >= 1500 then HRA = Rs500 and DA = 98% of the basic. The basic salary is entered interactively through the keyboard.

```
1 #!/bin/sh
2 read -p "Enter the salary : " base
3 base2=`expr $base / 100`
4 if [ $base -lt 1500 ]
5 then
6     echo "first"
7     value=$((($base + (($base2*2)) + (($base2*90))))
8     echo "The gross salary " $value
9 else
10    echo "second"
11    value=$((($base + 500 + (($base2*98))))
12    echo "The gross salary " $value
13 fi
```

```
root@Ayush500086400: ~/Desktop/lab7 80x27
root@Ayush500086400:~/Desktop/lab7# ./first.sh
Enter the salary : 1250
first
The gross salary  2354
root@Ayush500086400:~/Desktop/lab7# ./first.sh
Enter the salary : 10000
second
The gross salary  20300
root@Ayush500086400:~/Desktop/lab7#
```

2. Write a shell script that uses the for and while loop construct respectively to print the message "I Study in UPES" 5 times.

```
root@Ayush500086400:~/Desktop/lab7# ./second.sh
I am in UPES
I am in UPES
I am in UPES
I am in UPES
I am in UPES
WHILE LOOP
I am in UPES : 5
I am in UPES : 4
I am in UPES : 3
I am in UPES : 2
I am in UPES : 1
root@Ayush500086400:~/Desktop/lab7#
```

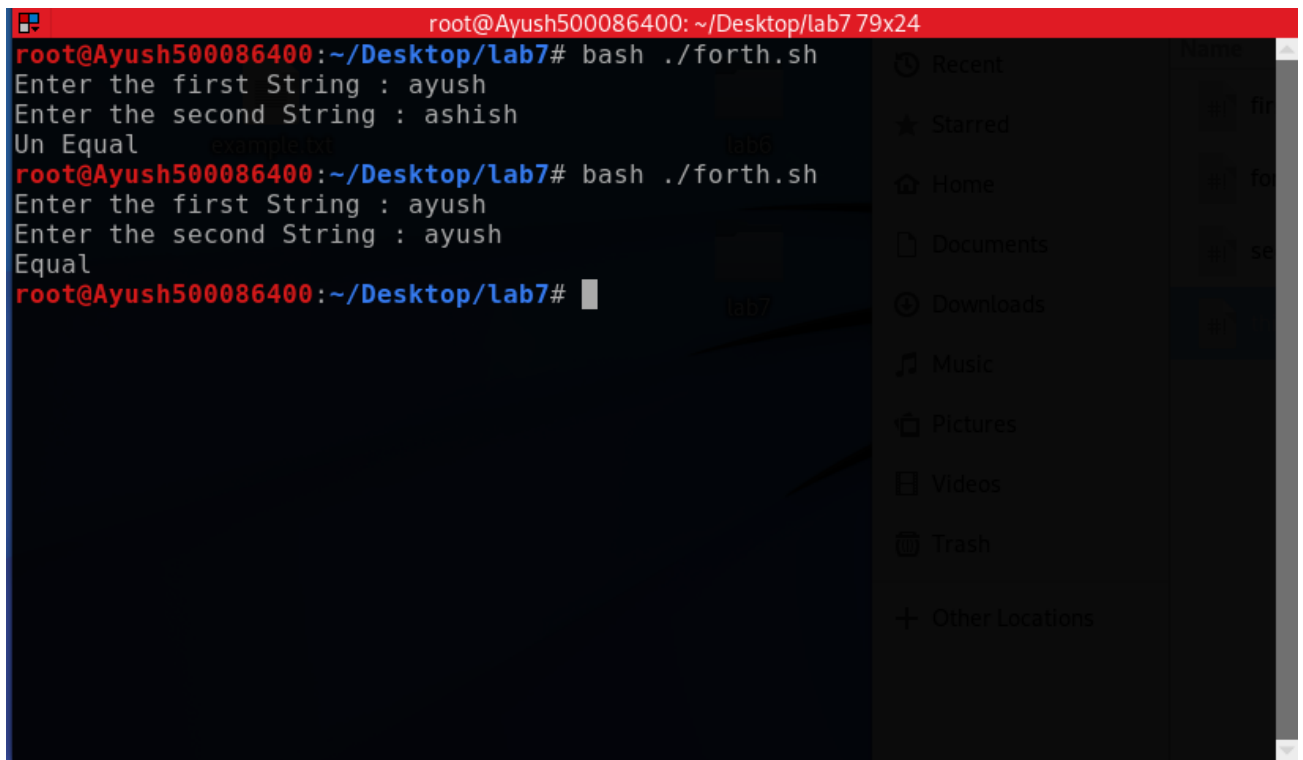
3. Find the maximum value from the three numbers entered by the user.

```
1 #! /bin/sh
2 read -p "Enter the first number : " num1
3 read -p "Enter the second number : " num2
4 read -p "Enter the third number : " num3
5
6 max=-1000
7
8 for i in $num1 $num2 $num3
9 do
10     if [ $i -gt $max ]
11     then
12         max=$i
13     fi
14 done
15 echo "The Maximum value is : " $max
```

```
root@Ayush500086400: ~/Desktop/lab7 80x24
root@Ayush500086400:~/Desktop/lab7# ./third.sh
Enter the first number : -900
Enter the second number : -300
Enter the third number : -1
The Maximum value is : -1
root@Ayush500086400:~/Desktop/lab7#
```

4. Accept two strings from the user and compare them using suitable string operators.

```
1 #!/bin/sh
2 read -p "Enter the first String : " str1
3 read -p "Enter the second String : " str2
4
5 if [ $str1 = $str2 ]
6 then
7     echo "Equal"
8 else
9     echo "Un Equal"
10 fi
```



```
root@Ayush500086400: ~/Desktop/lab7 79x24
root@Ayush500086400:~/Desktop/lab7# bash ./forth.sh
Enter the first String : ayush
Enter the second String : ashish
Un Equal
root@Ayush500086400:~/Desktop/lab7# bash ./forth.sh
Enter the first String : ayush
Enter the second String : ayush
Equal
root@Ayush500086400:~/Desktop/lab7#
```