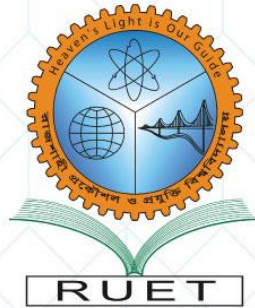# RAJSHAHI UNIVERSITY OF ENGINEERING & TECHNOLOGY
LAB REPORT

Course No: CSE 3202

Course Name: Sessional Based On CSE 3201

Submitted By:

Tushar Das
Roll: 1803108
Section: B
Dept. of Computer Science & Engineering
Rajshahi University of Engineering & Technology

Lab 2

Shell Coding

First Shell Code


```
#! /bin/bash
echo Hello World!
```

Output

Variable

The name of a variable can contain only letters (a to z or A to Z), numbers (0 to 9) or the underscore character (_).By convention, Unix shell variables will have their names in UPPERCASE.

Code

```
#! /bin/bash
a=10
b=20
echo a=$a and b=$b
```

Output

Arithmatic Operation

Code

```
c=$((a+b))
```

```
echo $c
```

Output

```
ubuntu@DESKTOP-NCF
Hello World!
a=10 and b=20
30
```

Practice 1

Code

```
d=$((c*c))
echo $d
```

Output

```
ubuntu@DESKTOP-
Hello World!
a=10 and b=20
30
900
```

Precision Of Number

Code

```
e=10.11
f=10.11
g=$e+$f
echo $g|bc
echo "scale=5;11.2113/3"|bc
```
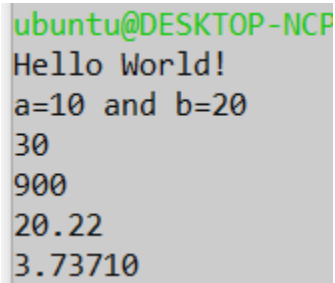**Output**

```
ubuntu@DESKTOP-NCPBVNJ:/
Hello World!
a=10 and b=20
30
900
20.22
```

Root of Number

Code

```
echo "root of 13 is "
echo "scale=4;sqrt(13)"|bc
```
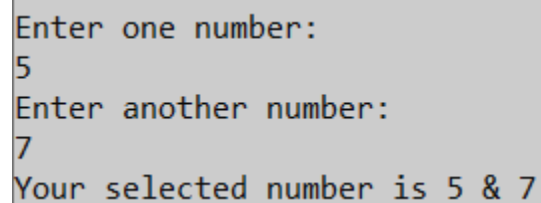
Output

```
ubuntu@DESKTOP-NCP
Hello World!
a=10 and b=20
30
900
20.22
3.73710
```

Input From User

Code

```
echo "Enter one number:"
read h
echo "Enter another number:"
read i
echo "Your selected number is $h & $i"
```

Output

```
Enter one number:
5
Enter another number:
7
Your selected number is 5 & 7
```

If Else Condition

Code

```
if [ $h -gt 0 ]
    then
    echo "You selected positive Number"
    else
    echo "Negative"
fi
```

Output

```
Your selected number is 5 & 7
You selected positive Number
ubuntu@DESKTOP-NCPBVNJ:/mnt/e/STUD
```

Loop

Code (While Loop)

```
#While Loop

echo "Printed By While Loop"

i=1
while (($i <= 10))
do
echo $i
((i++))
done
```

Output

```
Printed By While Loop
1
2
3
4
5
6
7
8
9
10
```
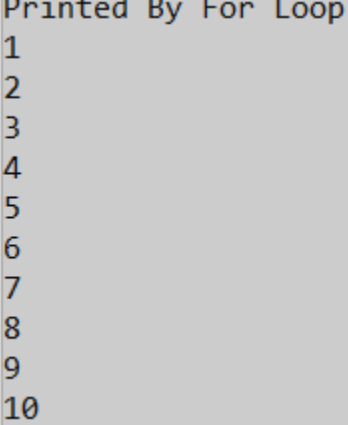
Code (For Loop)

```
#For Loop

echo "Printed By For Loop"

for i in {1..10}
```

```
do
echo $i
done
```

Output

```
Printed By For Loop
1
2
3
4
5
6
7
8
9
10
```

Discussions

This lab was for implementing basic shell scripting language. From this lab, we learned how to print, declare and store in variables, Arithmetic Operations, conditional statements, Loop statements in shell scripting language. This are the basic Programming concepts which is a must to learn a new language and in this lab we achieved this basic knowledge. All preliminary terms were learned from this lab.