Bansilal Ramnath Agarwal Charitable Trust's

Vishwakarma Institute of Technology, Pune-37

(Anautonomous Institute of Savitribai Phule Pune University)

Department of Multidisciplinary Engineering

Division	**CS A**
Batch	**B1**
Roll no.	**86**
Name	**Namrata Rajendra Gaikwad**

Lab Assignment No 2:

1.Even odd using conditional statements

```
#!/bin/bash

echo "Enter a number: "
read num

if [ $((num % 2)) -eq 0 ]; then
  echo "The number $num is even."
else
  echo "The number $num is odd."
fi
```

2.Array to insert values and delete values

```
#!/bin/bash

my_array[0]=10
my_array[1]=20
my_array[2]=30
my_array[3]=40
my_array[4]=50

echo "Original array: ${my_array[@]}"
index_to_insert=2
element_to_insert=25
my_array=("${my_array[@]:0:$index_to_insert}" "$element_to_insert"
"${my_array[@]:$index_to_insert}")

echo "Array after inserting at index $index_to_insert: ${my_array[@]}"

index_to_delete=3
my_array=("${my_array[@]:0:$index_to_delete}" "${my_array[@]:$((index_to_delete + 1))}")
```

echo "Array after deleting at index $index_to_delete: ${my_array[@]}"

```
┌──(kali㉿kali)-[~]
└─$ vi array1.sh

┌──(kali㉿kali)-[~]
└─$ chmod +x array1.sh

┌──(kali㉿kali)-[~]
└─$ ./array1.sh
Original array: 10 20 30 40 50
Array after inserting at index 2: 10 20 25 30 40 50
Array after deleting at index 3: 10 20 25 40 50
```

3.print table using for loop

```
#!/bin/bash

echo "Enter a number to print its multiplication table: "
read num

echo "Multiplication table for $num:"
for ((i = 1; i <= 10; i++)); do
  result=$((num * i))
  echo "$num x $i = $result"
done
```

```
┌──(kali㉿kali)-[~]
└─$ vi forloop.sh

┌──(kali㉿kali)-[~]
└─$ chmod +x forloop.sh

┌──(kali㉿kali)-[~]
└─$ ./forloop.sh
Enter a number to print its multiplication table:
12
Multiplication table for 12:
12 x 1 = 12
12 x 2 = 24
12 x 3 = 36
12 x 4 = 48
12 x 5 = 60
12 x 6 = 72
12 x 7 = 84
12 x 8 = 96
12 x 9 = 108
12 x 10 = 120
```

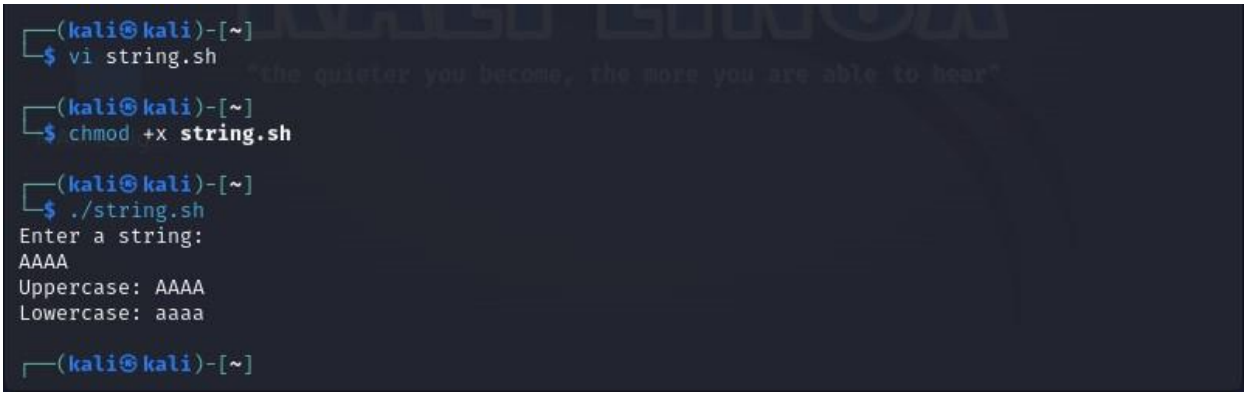
4. String to perform operations i.e uppercase ,lowercase

```
#!/bin/bash

echo "Enter a string: "
read input_string

uppercase_string=$(echo "$input_string" | tr '[:lower:]' '[:upper:]')
echo "Uppercase: $uppercase_string"

lowercase_string=$(echo "$input_string" | tr '[:upper:]' '[:lower:]')
echo "Lowercase: $lowercase_string"
```



5. Create File and insert contents

touch file.sh
vi file.sh

```
echo “Hello”
echo “Namrata”
```

6.Take Command line argument and fin area of circle

```
#!/bin/bash
calculate_area() {
        radius=$1
    area=$(echo "scale=2; 3.14159 * $radius * $radius" | awk '{printf "%.2f", $1}')
    echo "The area of the circle with radius $radius is: $area"
}
if [ $# -eq 0 ]; then
    echo "Usage: $0 <radius>"
    exit 1
fi
calculate_area $1
```