

Assignment-05

Use Random Function (***RANDOM***) to get Single Digit

```
MINGW64:/e/Bridgelabz/Assignments/Day5
GNU nano 4.9.3
#!/bin/bash

for (( i=0; i<=10; i++ ))
do
    echo $(( $RANDOM%9 ))
done
```

```
MINGW64:/e/Bridgelabz/Assignments/Day5
Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ nano singledigit.sh

Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./singledigit.sh
2
3
3
2
7
8
2
7
2
3
5
```

Use Random to get Dice Number between 1 to 6

```
Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./dicenum1to6.sh
1
1
2
2
1
6
2
5
1
2
```

Script

```
#!/bin/bash

for ((i=1; i<=10; i++))
do
    echo $(( $RANDOM%6 + 1 ))
done
```

Add two Random Dice Number and Print the Result

```
Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./addrandomdicenumber.sh
1 number : 6
2 number : 6
sum of numbers : 12

Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./addrandomdicenumber.sh
1 number : 2
2 number : 3
sum of numbers : 5

Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./addrandomdicenumber.sh
1 number : 1
2 number : 5
sum of numbers : 6
```

Script

```
#!/bin/bash

arr=();

for ((i=1; i<=2; i++))
do
    num=$(( $RANDOM%6 + 1 ))
    echo "$i number : "$num
    arr+=($num)
done
for i in ${arr[@]}
do
    sum=`expr $sum + $i`
done

echo "sum of numbers : "$sum
```

Write a program that reads 5 Random 2 Digit values, then find their sum and the average

```
#!/bin/bash

arr=();

for ((i=1; i<=5; i++))
do
    num=$((($RANDOM%90+10))
    echo "$i number : "$num
    arr+=($num)
done
for i in ${arr[@]}
do
    sum=`expr $sum + $i`
done
echo $sum
echo "Average of numbers : " `expr "scale=2;$sum/${#arr[@]}" | bc`
```

```
Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./addrandom2digitnumber.sh
1 number : 98
2 number : 26
3 number : 35
4 number : 23
5 number : 36
218
Average of numbers : 43.60
```

```
Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./addrandom2digitnumber.sh
1 number : 70
2 number : 16
3 number : 99
4 number : 76
5 number : 47
308
Average of numbers : 61.60
```

```
Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./addrandom2digitnumber.sh
1 number : 34
2 number : 21
3 number : 65
4 number : 86
5 number : 43
249
Average of numbers : 49.80
```

Unit Conversion

- 1ft = 12 in then 42 in = ? ft
- Rectangular Plot of 60 feet x 40 feet in meters
- Calculate area of 25 such plots in acres

```
#!/bin/bash -x

read -p "enter inches :" inch
#Converting inches to feet
Feet=$(echo "scale=2;$inch*1/12" | bc)
echo $Feet ft
#converting plot into meters
meters=$(echo "scale=2;60*40/(10.764)" | bc)
echo "one plot = " $meters mtrs
#we have 25 plots
plots=$(echo "scale=2;$meters*25" | bc)
echo $plots mtrs
#converting plots in meters to acres
acres=$(echo "scale=2;$plots/4047" | bc)
```

```
Prudhvi@PrudhviReddy MINGW64 /e/Bridgelabz/Assignments/Day5
$ ./unitconversion.sh
+ read -p 'enter inches :' inch
enter inches :12
++ echo 'scale=2;12*1/12'
++ bc
+ Feet=1.00
+ echo 1.00 ft
1.00 ft
++ echo 'scale=2;60*40/(10.764)'
++ bc
+ meters=222.96
+ echo 'one plot = ' 222.96 mtrs
one plot = 222.96 mtrs
++ echo 'scale=2;222.96*25'
++ bc
+ plots=5574.00
+ echo 5574.00 mtrs
5574.00 mtrs
++ echo 'scale=2;5574.00/4047'
++ bc
+ acres=1.37
```