

Name : Khushal Agarwal

Section : A

RollNo. : 30

Experiment – 20

AIM : Write a shell to demonstrate the working of array. Input 10 integer in array and display maximum, minimum, total sum and average of an array.

ShellScript :

```
echo -n "Enter elements of array : "
```

```
read -a arr
```

```
sum=0
```

```
len=${#arr[@]}
```

```
max=${arr[0]}
```

```
min=${arr[0]}
```

```
echo "length of the array is $len"
```

```
for i in ${arr[@]}
```

```
do
```

```
if [ $max -lt $i ]
```

```
then
```

```
max=$i
```

```
fi
```

```
if [ $min -gt $i ]
```

```
then
```

```
min=$i
```

```
fi
```

```
sum=`expr $sum + $i`
```

```
done
```

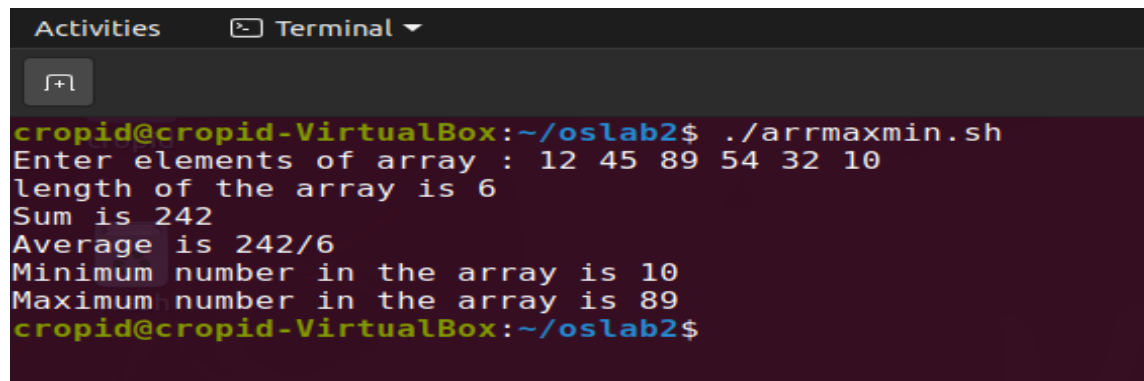
```
avg=`expr $sum/$len`
```

```
echo "Sum is $sum"
```

```
echo "Average is $avg"
```

```
echo "Minimum number in the array is $min"
```

```
echo "Maximum number in the array is $max"
```

A screenshot of a Linux terminal window. The title bar shows 'Activities' and 'Terminal'. The terminal content shows a user running a script './arrmaxmin.sh' in a directory '~/oslab2'. The script prompts for array elements, which are '12 45 89 54 32 10'. It then outputs the array length (6), the sum (242), the average (242/6), the minimum value (10), and the maximum value (89).

```
cropid@cropid-VirtualBox:~/oslab2$ ./arrmaxmin.sh
Enter elements of array : 12 45 89 54 32 10
length of the array is 6
Sum is 242
Average is 242/6
Minimum number in the array is 10
Maximum number in the array is 89
cropid@cropid-VirtualBox:~/oslab2$
```