

Name: Chitra Shamakalyan Bapat

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Day 8 Assignment

1. Write a program in the following steps
 - a. Roll a die and find the number between 1 to 6
 - b. Repeat the Die roll and find the result each time
 - c. Store the result in a dictionary
 - d. Repeat till any one of the number has reached 10 times
 - e. Find the number that reached maximum times and the one that was for minimum times

PROGRAM:

```
GNU nano 4.9.3      8_1.sh      Modified
#!/bin/bash
declare -A assArray
a=0
b=0
c=0
d=0
e=0
f=0
min=10
max=0

while [ $a -ne 10 ] && [ $b -ne 10 ] && [ $c -ne 10 ] && [ $d -ne 10 ] && [ $e
do
r=$(( RANDOM%6 + 1 ))

if [ $r -eq 1 ];
then
assArray[1]+=$r,
a=$(( $a+1 ))

elif [ $r -eq 2 ];
then
assArray[2]+=$r,
b=$(( $b+1 ))

elif [ $r -eq 3 ];
then
assArray[3]+=$r,
c=$(( $c+1 ))

elif [ $r -eq 4 ];
then
assArray[4]+=$r,
d=$(( $d+1 ))

elif [ $r -eq 5 ];
then
assArray[5]+=$r,
e=$(( $e+1 ))

elif [ $r -eq 6 ];
then
assArray[6]+=$r,
f=$(( $f+1 ))

fi
done
```

```

for (( i=1; i<=6; i++ ))
do

echo "assArray[$i]  "
echo ${assArray[$i]}
length=$(( ${#assArray[$i]}/2 ))
echo "length = $length"
echo ""

if [ $length -lt $min ];
then
min=$length
mi=$i
fi

if [ $length -gt $max ];
then
max=$length
ma=$i
fi

done

echo "$mi occured minimum no of times i.e $min"
echo "$ma occured maximum no of times i.e $max"

```

OUTPUT:

```

chitr@LAPTOP-1578T343 MINGW64 ~/BRIDGELABZ (master)
$ ./8_1.sh
assArray[1]
1,1,1,1,1,1,1,1,1,
length = 9

assArray[2]
2,2,2,2,2,
length = 5

assArray[3]
3,3,3,3,3,3,3,
length = 7

assArray[4]
4,4,4,4,4,4,
length = 6

assArray[5]
5,5,5,5,5,
length = 5

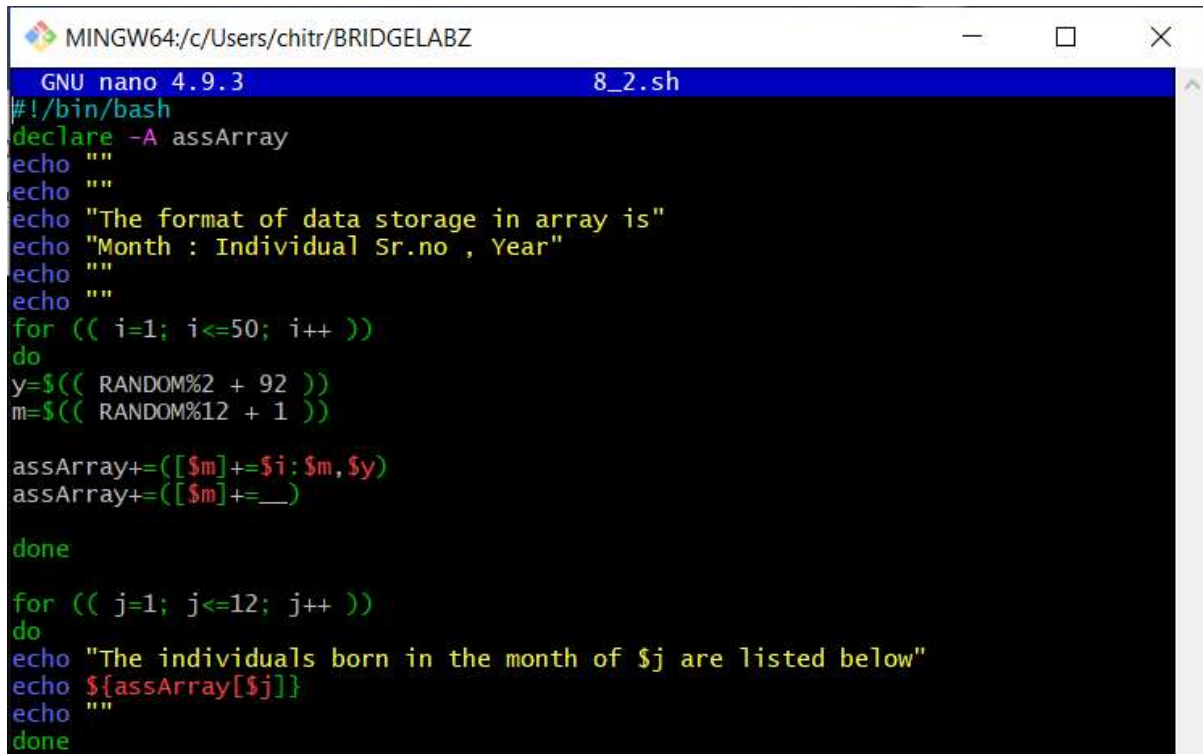
assArray[6]
6,6,6,6,6,6,6,6,6,6,
length = 10

2 occured minimum no of times i.e 5
6 occured maximum no of times i.e 10

```

2. Write a Program to generate a birth month of 50 individuals between the year 92 & 93. Find all the individuals having birthdays in the same month. Store it to finally print.

PROGRAM:



```
MINGW64:/c/Users/chitr/BRIDGELABZ
GNU nano 4.9.3 8_2.sh
#!/bin/bash
declare -A assArray
echo ""
echo ""
echo "The format of data storage in array is"
echo "Month : Individual Sr.no , Year"
echo ""
echo ""
for (( i=1; i<=50; i++ ))
do
y=$(( RANDOM%2 + 92 ))
m=$(( RANDOM%12 + 1 ))

assArray+=([ $m ]+= $i: $m, $y)
assArray+=([ $m ]+= __)

done

for (( j=1; j<=12; j++ ))
do
echo "The individuals born in the month of $j are listed below"
echo ${assArray[$j]}
echo ""
done
```

OUTPUT:

```
chitr@LAPTOP-1578T343 MINGW64 ~/BRIDGELABZ (master)
$ ./8_2.sh

The format of data storage in array is
Month : Individual Sr.no , Year

The individuals born in the month of 1 are listed below
18:1,92__25:1,93__

The individuals born in the month of 2 are listed below
12:2,92__23:2,92__36:2,93__45:2,93__

The individuals born in the month of 3 are listed below
4:3,93__6:3,93__10:3,92__14:3,93__22:3,93__35:3,93__

The individuals born in the month of 4 are listed below
8:4,93__30:4,93__31:4,92__38:4,93__

The individuals born in the month of 5 are listed below
24:5,92__28:5,93__32:5,92__40:5,93__50:5,93__

The individuals born in the month of 6 are listed below
2:6,93__11:6,93__13:6,92__27:6,93__47:6,93__

The individuals born in the month of 7 are listed below
34:7,93__42:7,93__43:7,93__44:7,93__49:7,93__

The individuals born in the month of 8 are listed below
20:8,93__33:8,92__39:8,92__

The individuals born in the month of 9 are listed below
15:9,92__26:9,93__

The individuals born in the month of 10 are listed below
1:10,93__19:10,92__21:10,92__29:10,92__37:10,92__41:10,92__

The individuals born in the month of 11 are listed below
5:11,93__7:11,93__9:11,93__16:11,92__17:11,92__46:11,92__48:11,93__

The individuals born in the month of 12 are listed below
3:12,92__
```