**Dictionary Practice Problems**

1. Write a program in the following steps
2. Roll a die and find the number between 1 to 6
3. Repeat the Die roll and find the result each time
4. Store the result in a dictionary
5. Repeat till one of the numbers has reached 10 times
6. Find the number that reached maximum times and the one that was for minimum times.

#!/bin/bash -x

month=(january february march april may june july august september october november december )

countOne=0;

countTwo=0;

countThree=0;

countFour=0;

countFive=0;

countSix=0;

countSeven=0;

countEight=0;

countNine=0;

countTen=0;

countEleven=0;

countTwelve=0;

declare -A birthDictionary

for((person=1;person<=50;person++))

do

birthMonth=$((RANDOM%12+1))

case $birthMonth in

1)

((countOne++))

birthDictionary[${month[0]}]=$countOne

;;

2)

((countTwo++))

birthDictionary[${month[1]}]=$countTwo

;;

3)

((countThree++))

birthDictionary[${month[2]}]=$countThree

;;

4)

((countFour++))

birthDictionary[${month[3]}]=$countFour

;;

5)

((countFive++))

birthDictionary[${month[4]}]=$countFive

;;

6)

((countSix++))

birthDictionary[${month[5]}]=$countSix

;;

7)

((countSeven++))

birthDictionary[${month[6]}]=$countSeven

;;

8)

((countEight++))

birthDictionary[${month[7]}]=$countEight

;;

9)

((countNine++))

birthDictionary[${month[8]}]=$countNine

;;

10)

((countTen++))

birthDictionary[${month[9]}]=$countTen

;;

11)

((countEleven++))

birthDictionary[${month[10]}]=$countEleven

;;

12)

((countTwelve++))

birthDictionary[${month[11]}]=$countTwelve

;;

esac

done

echo "Birth dictionary is:" ${birthDictionary[@]};

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

#!/bin/bash -x

firstDiceCount=0;

secondDiceCount=0;

thirdDiceCount=0;

fourthDiceCount=0;

fifthDiceCount=0;

sixthDiceCount=0;

while [ $firstDiceCount -lt 10 -a $secondDiceCount -lt 10 -a $thirdDiceCount -lt 10 -a $fo>

do

diceNumber=$(( (RANDOM % 6 ) + 1 ));

declare -A diceDictionary;

if [ $diceNumber -eq 1 ]

then

(( firstDiceCount++ ));

diceDictionary[1]="$firstDiceCount";

elif [ $diceNumber -eq 2 ]

then

(( secondDiceCount++ ));

diceDictionary[2]="$secondDiceCount";

elif [ $diceNumber -eq 3 ]

then

(( thirdDiceCount++ ));

diceDictionary[3]="$thirdDiceCount";

elif [ $diceNumber -eq 4 ]

then

(( fourthDiceCount++ ));

diceDictionary[4]="$fourthDiceCount";

elif [ $diceNumber -eq 5 ]

then

(( fifthDiceCount++ ));

diceDictionary[5]="$fifthDiceCount";

else

(( sixthDiceCount++ ));

diceDictionary[6]="$sixthDiceCount";

fi

done

minDiceNumber=11;

key=0;

for (( index=1; index<=${#diceDictionary[@]}; index++ ))

do

if [ ${diceDictionary[$index]} -eq 10 ]

then

echo "Maximum Dice number $index appears for 10 times";

fi

if [ ${diceDictionary[$index]} -lt $minDiceNumber ]

then

minDiceNumber=${diceDictionary[$index]};

key=$index;

fi

done

echo "Minimum Dice number $key appears for $minDiceNumber times";

echo "${diceDictionary[@]}";

echo "${!diceDictionary[@]}";