**Problem 1**

#!/bin/bash -x

declare -A Dice

Dice[1]=0

Dice[2]=0

Dice[3]=0

Dice[4]=0

Dice[5]=0

Dice[6]=0

minimum=11

while [[ ${Dice[1]} -ne 10 && ${Dice[2]} -ne 10 && ${Dice[3]} -ne 10 && ${Dice[4]} -ne 10 && ${Dice[5]} -ne 10 && ${Dice[6]} -ne 10 ]]

do

no=$(((RANDOM%6)+1))

if [ $no -eq 1 ]

then

Dice[1]=$((${Dice[1]}+1))

if [ ${Dice[1]} -eq 10 ]

then

flag=1

fi

if [ ${Dice[1]} -lt $minimum ]

then

minimum=${Dice[1]}

flagMinimum=1

fi

elif [ $no -eq 2 ]

then

Dice[2]=$((${Dice[2]}+1))

if [ ${Dice[2]} -eq 10 ]

then

flag=2

fi

if [ ${Dice[2]} -lt $minimum ]

then

minimum=${Dice[2]}

flagMinimum=2

fi

elif [ $no -eq 3 ]

then

Dice[3]=$((${Dice[3]}+1))

if [ ${Dice[3]} -eq 10 ]

then

flag=3

fi

if [ ${Dice[3]} -lt $minimum ]

then

minimum=${Dice[3]}

flagMinimum=3

fi

elif [ $no -eq 4 ]

then

Dice[4]=$((${Dice[4]}+1))

if [ ${Dice[4]} -eq 10 ]

then

flag=4

fi

if [ ${Dice[4]} -lt $minimum ]

then

minimum=${Dice[4]}

flagMinimum=4

fi

elif [ $no -eq 5 ]

then

Dice[5]=$((${Dice[5]}+1))

if [ ${Dice[5]} -eq 10 ]

then

flag=5

fi

if [ ${Dice[5]} -lt $minimum ]

then

minimum=${Dice[5]}

flagMinimum=5

fi

else

Dice[6]=$((${Dice[6]}+1))

if [ ${Dice[6]} -eq 10 ]

then

flag=6

fi

if [ ${Dice[6]} -lt $minimum ]

then

minimum=${Dice[6]}

flagMinimum=6

fi

fi

done

echo "The number in Dice become 10 on counting of rolling" $flag

echo "The mimium rolled for a number on dice" $flagMinimum

**Problem 2:**

#!/bin/bash

declare -A DOBDictionary

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

do

DateofMonth=`shuf -i 1-12 -n 1`

year=`shuf -i 92-93 -n 1`

DateofBirth=$DateofMonth"/"$year"of ["$i"th person]"

DOBDictionary[$DateofMonth]+=$DateofBirth

done

for((i=1;i<=12;i++))

do

echo "Persons with DOB,which has date of month=" $i

echo ${DOBDictionary[$i]}

done