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

#!/bin/bash -x

count=0;

max\_val=0;

min=10;

min\_val=0;

declare -A roll\_records

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

do

roll\_records[$i]=0

done

while [ ! $count -eq 10 ]

do

roll\_a\_dice=$(( 1 + RANDOM%6 ))

count=${roll\_records[$roll\_a\_dice]}

((count++))

roll\_records[$roll\_a\_dice]=$count

done

count=0

for i in "${!roll\_records[@]}"

do

if [ $i -eq 1 ]

then

min=${roll\_records[$i]}

min\_val=$i

max\_val=$i

elif [ $min -gt ${roll\_records[$i]} ]

then

min=${roll\_records[$i]}

min\_val=$i

elif [ 10 -eq ${roll\_records[$i]} ]

then

max\_val=$i

fi

done

for key in "${!roll\_records[@]}"

do

echo $key"-" ${roll\_records[$key]}

done

echo "the number reached minimum time is" :$min\_val

echo "the number reached maximum time is" :$max\_val

