

In the [last post](#) I wrote about how to generate random numbers in a given range: [min, max].

In this post we will use that code to simulate a dice throw.

We would only need to modify the last program slightly, such that min=1 and max=6, for a dice.

CODE:

```

/*****
*****DICE THROW*****
*****/
#include<stdio.h>
#include<math.h>
/**Function that generates a random number.
Parameters:
r0: initial (first) seed
a: scale factor , so that a*r0 give the first random number
m: gives the max. value of random numbers that can be generated (m-1)
c: additional displacement(offset) factor
**/
int rand(int r0, int a, int m, int c){
    int r1=(a*r0+c)%m;
    return r1;
}
/**Function that generates random numbers in a given range: [min,max], given a seed r0,
and stores them in an array that is passed as an argument.
Parameters:
r0: initial (first) seed
a: scale factor , so that a*r0 give the first random number
m: gives the max. value of random numbers that can be generated (m-1)
c: additional displacement factor
n: no. of random numbers to be generated
x[n]: array that will store the random numbers
min: lower limit for random nos.
max: upper limit for random nos.
**/
void randomNos(int r0, int a, int m, int c, int n, int x[n], int min, int max){
    int r1=rand(r0,a,m,c);
    int r2=min+((max-min+1)*r1)/m;
    int i;
    for(i=0;i<n;i++){
        x[i]=r2;
        r1=rand(r1,a,m,c);
        r2=min+((max-min+1)*r1)/m;
    }
}
main(){
    int min=1, max=6, n; //For dice the range of random Nos. needed is 1-6
    int a=1093, m=86436, c=18257, r0=43; //Constants for random number
generation
    printf("Enter the no. of dice throws required:\n");
    scanf("%d",&n);

```

```

int random[n];          //array that stores the dice throw results
randomNos(r0, a, m, c, n, random, min, max);
int i;
printf("The dice throws are:\n");
for(i=0;i<n;i++){
    printf("%d\n",random[i]);
}
}

```

OUTPUT:

```

Enter the no. of dice throws required:
24
The dice throws are:
5
3
1
2
3
2
4
1
2
6
5
1
4
1
4
6
5
1
3
5
3
5
5
3

```

Sample Output



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