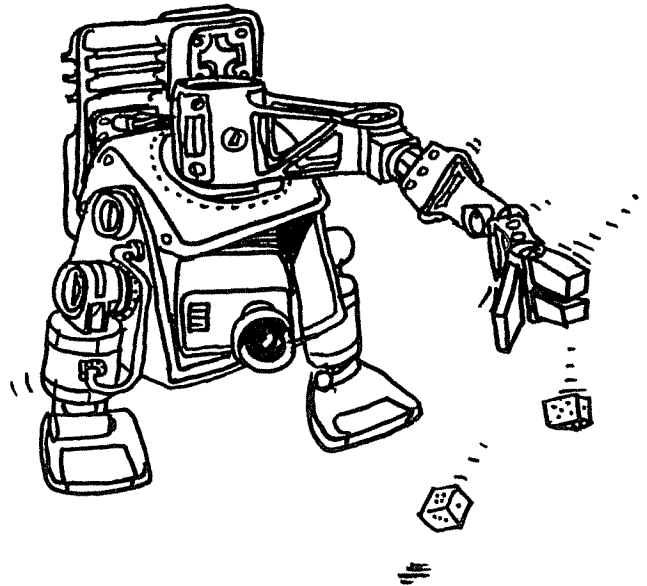


Dice

Not exactly a game, this program simulates rolling a pair of dice a large number of times and prints out the frequency distribution. You simply input the number of rolls. It is interesting to see how many rolls are necessary to approach the theoretical distribution:

```
2  1/36    2.7777 ...%
3  2/36    5.5555 ...%
4  3/36    8.3333 ...%
etc.
```

Daniel Freidus wrote this program while in the seventh grade at Harrison Jr-Sr High School, Harrison, New York.



DICE
CREATIVE COMPUTING MORRISTOWN, NEW JERSEY

THIS PROGRAM SIMULATES THE ROLLING OF A PAIR OF DICE. YOU ENTER THE NUMBER OF TIMES YOU WANT THE COMPUTER TO 'ROLL' THE DICE. WATCH OUT, VERY LARGE NUMBERS TAKE A LONG TIME. IN PARTICULAR, NUMBERS OVER 5000.

HOW MANY ROLLS? 10000

TOTAL SPOTS	NUMBER OF TIMES
2	312
3	543
4	820
5	1148
6	1395
7	1680
8	1330
9	1125
10	841
11	542
12	264

TRY AGAIN? YES

HOW MANY ROLLS? 100

TOTAL SPOTS	NUMBER OF TIMES
2	1
3	6
4	9
5	9
6	16
7	22
8	16
9	9
10	11
11	1
12	0

```
2 PRINT TAB(34);"DICE"
4 PRINT TAB(15);"CREATIVE COMPUTING MORRISTOWN, NEW JERSEY"
6 PRINT:PRINT:PRINT
10 DIM F(12)
20 REM DANNY FREIDUS
30 PRINT "THIS PROGRAM SIMULATES THE ROLLING OF A"
40 PRINT "PAIR OF DICE."
50 PRINT "YOU ENTER THE NUMBER OF TIMES YOU WANT THE COMPUTER TO"
60 PRINT "'ROLL' THE DICE. WATCH OUT, VERY LARGE NUMBERS TAKE"
70 PRINT "A LONG TIME. IN PARTICULAR, NUMBERS OVER 5000."
80 FOR Q=1 TO 12
90 F(Q)=0
100 NEXT Q
110 PRINT:PRINT "HOW MANY ROLLS";
120 INPUT X
130 FOR S=1 TO X
140 A=INT(6*RND(1))+1
150 B=INT(6*RND(1))+1
160 R=A+B
170 F(R)=F(R)+1
180 NEXT S
185 PRINT
190 PRINT "TOTAL SPOTS","NUMBER OF TIMES"
200 FOR V=2 TO 12
210 PRINT V,F(V)
220 NEXT V
222 PRINT:PRINT "TRY AGAIN";
223 INPUT Z$
224 IF Z$="YES" THEN 80
240 END
```