```java
import java.util.*;

public class craps {

public static void main(String[] args) {

times!");

Random rand = new Random(); int count = 0;

for(int i = 0; i <= 100; i++){

if(craps(rand)) count++;

} System.out.println("You win " + count + "

craps(rand); }

public static boolean craps(Random rand){ int dice1 = rand.nextInt(6) + 1;

int dice2 = rand.nextInt(6) + 1;

int sum = dice1 + dice2; int point = sum;

  String win = "you win";
   String lose = "you lose";
   String score = "point=";


if(sum == 7 || sum == 11){ System.out.printf("[%d,%d] %d

%s\n",dice1,dice2,sum,win);


return true; }

else if(sum == 2 || sum == 3 || sum == 12){ System.out.printf("[%d,%d] %d

%s\n",dice1,dice2,sum,lose);


return false; }

else{
```

```java
System.out.printf("[%d,%d] %s
%d",dice1,dice2,point,sum);

int dice3 = rand.nextInt(6) + 1; int dice4 = rand.nextInt(6) + 1; int sum2 = dice3 + dice4;
do{
dice3 = rand.nextInt(6) + 1; dice4 = rand.nextInt(6) + 1; sum2 = dice3 + dice4;if(sum2
== point){
System.out.printf("[%d,%d] %d %s\n",dice3,dice4,sum2,win);
return true; }else{
System.out.printf("[%d,%d]",dice3,dice4);
}}
while(sum2 != 7);{ System.out.printf("[%d,%d] %d
%s\n",dice3,dice4,sum2,lose);

return false; }
}}
}
```

[[2,5] 7 you win [5,6] 11 you win

[1,1] 2 you lose

[1,2] 3 you lose

[6,6] 12 you lose

[3,6] 9 9[6,1][6,1] 7 you lose

[1,5] 6 6[3,1][2,1][3,1][3,3] 6 you win

[2,2] 4 4[1,5][1,2][2,5][2,5] 7 you lose

[4,2] 6 6[5,1] 6 you win

[5,4] 9 9[3,3][3,6] 9 you win

[3,5] 8 8[6,2] 8 you win

[6,3] 9 9[3,6] 9 you win

[4,5] 9 9[5,3][5,3][3,6] 9 you win

[1,6] 7 you win

[5,4] 9 9[3,6] 9 you win

[5,3] 8 8[2,3][2,5][2,5] 7 you lose

[2,5] 7 you win

[6,6] 12 you lose

[3,5] 8 8[1,1][2,6] 8 you win

[2,2] 4 4[3,4][3,4] 7 you lose

[5,1] 6 6[1,1][4,2] 6 you win

[3,3] 6 6[2,6][2,5][2,5] 7 you lose

[4,5] 9 9[1,1][1,2][1,2][4,5] 9 you win

[1,5] 6 6[5,3][1,4][2,5][2,5] 7 you lose

[2,6] 8 8[5,4][5,2][5,2] 7 you lose

[5,4] 9 9[2,1][4,4][3,4][3,4] 7 you lose

[3,5] 8 8[6,3][1,2][3,4][3,4] 7 you lose

[3,1] 4 4[4,1][2,1][2,6][3,6][6,2][3,6][3,1] 4 you win

[1,3] 4 4[1,6][1,6] 7 you lose

[2,6] 8 8[1,2][5,4][5,2][5,2] 7 you lose

[4,6] 10 10[6,5][5,4][5,3][5,2][5,2] 7 you lose

[4,2] 6 6[6,5][6,3][5,5][3,5][1,6][1,6] 7 you lose

[3,3] 6 6[6,1][6,1] 7 you lose

[4,5] 9 9[4,1][2,3][6,5][1,5][6,4][3,1][6,5][1,4][3,4][3,4] 7

you lose

[4,6] 10 10[3,6][3,5][6,4] 10 you win

[1,1] 2 you lose

[1,3] 4 4[3,3][3,4][3,4] 7 you lose

[2,2] 4 4[5,1][2,3][6,5][1,5][6,5][3,3][4,6][5,1][5,5][2,2] 4

you win

[2,1] 3 you lose

[3,1] 4 4[3,6][5,4][2,4][4,4][6,2][1,3] 4 you win

[5,6] 11 you win

[5,6] 11 you win

[3,6] 9 9[6,5][6,6][3,1][5,2][5,2] 7 you lose

[5,1] 6 6[6,4][5,6][6,1][6,1] 7 you lose

[2,1] 3 you lose

[3,4] 7 you win

[2,4] 6 6[5,3][5,4][2,6][4,5][1,5] 6 you win

[2,1] 3 you lose

[2,1] 3 you lose

[1,3] 4 4[3,5][2,5][2,5] 7 you lose

[4,4] 8 8[1,1][3,3][4,1][6,4][4,5][6,5][5,6][6,2] 8 you win

[6,1] 7 you win

[6,1] 7 you win

[1,2] 3 you lose

[4,3] 7 you win

[1,2] 3 you lose

[2,6] 8 8[4,1][2,1][1,4][5,4][3,1][2,4][4,3][4,3] 7 you lose

[2,4] 6 6[3,3] 6 you win

[4,5] 9 9[6,4][1,5][3,4][3,4] 7 you lose

[4,5] 9 9[2,2][3,4][3,4] 7 you lose

[5,6] 11 you win

[2,6] 8 8[4,4] 8 you win

[1,1] 2 you lose

[3,5] 8 8[6,4][3,6][6,4][6,6][5,2][5,2] 7 you lose

[3,4] 7 you win

[4,4] 8 8[4,3][4,3] 7 you lose

[1,1] 2 you lose

[1,3] 4 4[1,5][2,3][5,6][3,1] 4 you win

[1,3] 4 4[6,5][2,3][4,1][5,2][5,2] 7 you lose

[3,3] 6 6[6,5][3,2][5,6][2,3][6,1][6,1] 7 you lose

[5,2] 7 you win

[1,1] 2 you lose

[5,6] 11 you win

[1,6] 7 you win

[3,6] 9 9[6,6][6,4][2,4][2,6][1,3][6,3] 9 you win

[2,6] 8 8[6,3][3,3][6,6][5,6][5,3] 8 you win

[1,6] 7 you win

[4,1] 5 5[4,1] 5 you win

[1,6] 7 you win

[4,2] 6 6[5,4][1,3][1,1][6,1][6,1] 7 you lose

[3,2] 5 5[5,5][1,2][3,5][2,5][2,5] 7 you lose

[1,4] 5 5[6,1][6,1] 7 you lose

[5,1] 6 6[6,3][1,1][5,3][5,2][5,2] 7 you lose

[6,6] 12 you lose

[2,4] 6 6[4,4][5,3][4,4][5,2][5,2] 7 you lose

[4,5] 9 9[4,2][3,6] 9 you win

[2,3] 5 5[4,4][3,5][1,5][2,3] 5 you win

[5,1] 6 6[5,4][4,3][4,3] 7 you lose

[1,4] 5 5[1,2][3,4][3,4] 7 you lose

[4,3] 7 you win

[5,1] 6 6[4,2] 6 you win

[3,2] 5 5[3,4][3,4] 7 you lose

[6,4] 10 10[2,3][3,4][3,4] 7 you lose

[4,6] 10 10[4,1][1,6][1,6] 7 you lose

[5,5] 10

10[5,6][4,1][6,3][4,2][6,2][2,6][1,2][5,6][1,2][1,5][1,2][3,5][1

,4][6,1][6,1] 7 you lose

[1,2] 3 you lose

[5,6] 11 you win

[2,4] 6 6[4,3][4,3] 7 you lose

[6,2] 8 8[2,5][2,5] 7 you lose

[1,5] 6 6[3,5][2,6][6,1][6,1] 7 you lose

[5,6] 11 you win

You win 52 times!