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CSC 2300 Project

Field Test

For the most part, this project was pretty similar to the Craps assignment, and I took some code from that project and used it in this one. The part that gave me the biggest issue was the loop involving the point. I spent at least an hour working on that specific portion, as my code would either get stuck in the loop or continuously alter between outputting a positive and negative winnings amount. I knew something was wrong but I could not quite figure it out, so I asked Jamie Chang to help me. She advised me to use booleans as opposed to comparison statements like I originally had, and after that, the code ran smoothly. On average, when I have one million trials, I end up with a value of about $-0.15, which falls in line with the thinking that I should lose money. Overall, this assignment took me about an hour and a half to complete.

**Field.java**

**import** support.MultiDie;

**public** **class** Craps{

**public** **static** **void** main (String[] args){

**int** win = 0;

**int** bet = 10;

**int** roll;

**int** num = 1000000;

MultiDie d1 = **new** MultiDie();

MultiDie d2 = **new** MultiDie();

**for** (**int** i = 1; i <= num; i++){

d1.roll();

d2.roll();

roll = d1.getFaceValue() + d2.getFaceValue();

//System.out.println(roll);

**if**(roll == 2 || roll == 3 || roll == 12){

win = win - bet;

}

**else** **if** (roll == 7 || roll == 11){

win = win + bet;

}

**else**{

**int** point = roll;

**boolean** z = **true**;

**while** (z){

d1.roll();

d2.roll();

roll = d1.getFaceValue() + d2.getFaceValue();

**if** (roll == 7){

win = win - bet;

z = **false**;

}

**if** (roll == point) {

win = win+bet;

z = **false**;

}

}

}

}

System.***out***.println("Number of Trials: "+num);

**double** avg = (**double**)win/num;

System.***out***.println("Average money won/lost: "+avg);

}

}

**Output:**

Number of Trials: 1000000

Average money won/lost: -0.14212

Number of Trials: 1000000

Average money won/lost: -0.15826

Number of Trials: 1000000

Average money won/lost: -0.1495

Number of Trials: 1000000

Average money won/lost: -0.14378