Katie Bogan 2/20/17

CSC 2300 Project

Craps Field Test

This project was not very difficult. I instantiated the two die and if a winning number was rolled, the program “won” the respective value of either 10 or 20 dollars. I did not include the bet of $10 in the program because if you bet it and won it back, you did not lose money, but you did gain money, so my calculations are only of money gained or lost. Since the games in the casino are always not in favor of the player, I anticipated that the player would lose money. I end up losing on average a little over 50 cents per round.

**Field.java**

**import** support.MultiDie;

**public** **class** Field {

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

// **TODO** Auto-generated method stub

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

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

**int** roll;

**int** win=0;

**int** num = 1000000;

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

d1.roll();

d2.roll();

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

**if** (roll == 3 || roll== 4 || roll == 9 || roll == 10 || roll == 11){

win = win + 10;

//System.out.println(roll+"\t"+win);

}

**else**{

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

win = win + 20;

//System.out.println(roll+"\t"+win);

}

**else**{

win = win-10;

//System.out.println(roll+"\t"+win);

}

}

}

System.***out***.println("Money won/lost: "+win+" dollars");

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

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

}

}

**Outcome:**

Money won/lost: -567990 dollars

Average money won or lost: -0.56799 dollars

Money won/lost: -552490 dollars

Average money won or lost: -0.55249 dollars

Money won/lost: -568600 dollars

Average money won or lost: -0.5686 dollars