**Pseudocode Group 2**

**Group Members**

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Variables

1. Student 1 = A
2. Student 2 = B
3. Number of successful baskets by A = x
4. Number of successful baskets by B = y
5. Prize money = w
6. Number of ties = T

Start

1.A and B challenge each other to the shoot-out.

2.A simulated die is rolled once by A and B each.

3.Die rolling (outcome).

a) If A>B then A goes to Step.4.

b) If B>A then B goes to Step.4.

c) If A=B then repeat Step.2 until a winner is declared.

4. The winner of Step.3 throws the ball 4 times.

5. The second player throws the ball 4 times.

6. Scenario i) ii) iii)

i) x>y = A wins. (Go to Step.7)

ii) y>x = B wins. (Go to Step.7)

iii) x=y = tie (T) (Repeat step.4)

7. Determine prize money

a) If Scenario i) x-y = w

b) If Scenario ii) y-x = w

c) if Scenario iii) then w - (T \* $0.50) = w

8. Gives prize money

A) If scenario i) happens B gives money to A.

B) If scenario ii) happens A gives money to B.

9. If w is decimal, it is rounded of to nearest whole number.

10. If w is negative then at least 1$ is given to the winner.

End

Testing of the code

1. A and B challenge each other to shootout.
2. Die rolled to determine who goes first.
3. A gets a 6 on the die B gets 5.
4. A goes first to throw 4 baskets.
5. A succeeds in 3 of the 4 attempts.
6. B throws 4 baskets.
7. B gets 2 out of the 4.
8. A wins the shootout.
9. B have to pay the prize money to A.
10. x=3 y=2 x-y=w. 3-2 = 1
11. B pays $1 to A.