

## Question 5 (Bonus)\Main.java

```
1  import java.util.Scanner;
2
3  public class Main {
4      public static void main(String[] args) {
5          Scanner scanner = new Scanner(System.in);
6
7          // Initialize player and house with initial money
8          Player player = new Player(100);
9          House house = new House(1000);
10
11         // Create a BigSmallGame instance
12         BigSmallGame bigSmallGame = new BigSmallGame(player.getMoney(), house.getMoney());
13
14         System.out.println("The house has $" + house.getMoney());
15         System.out.println("The player has $" + player.getMoney());
16         System.out.println("Try your luck to win all the money of the house!");
17
18         boolean continuePlaying = true;
19         int round = 1;
20
21         while (continuePlaying && player.getMoney() > 0 && house.getMoney() > 0) {
22             System.out.println("\nRound " + round + ":");
23
24             // Player places a bet
25             int betAmount = player.placeBet(scanner);
26
27             // Player chooses Big or Small
28             String choice = player.chooseOption(scanner);
29
30             // Play the round and check the outcome
31             boolean win = bigSmallGame.playRound(betAmount, choice);
32
33             // Update player and house money based on the outcome
34             if (win) {
35                 System.out.println("You won $" + betAmount + "!");
36                 player.setMoney(player.getMoney() + betAmount);
37                 house.setMoney(house.getMoney() - betAmount);
38             } else {
39                 System.out.println("You lost $" + betAmount + "!");
40                 player.setMoney(player.getMoney() - betAmount);
41                 house.setMoney(house.getMoney() + betAmount);
42             }
43
44             System.out.println("House has $" + house.getMoney());
45             System.out.println("Player has $" + player.getMoney());
46
47             // Ask if the player wants to continue playing
48             System.out.println("Do you still want to continue to play? (true/false)");
49             continuePlaying = scanner.nextBoolean();
50             round++;
51         }
52
53         // Determine the final winner
54         if (player.getMoney() <= 0) {
55             System.out.println("Player ran out of money! House wins!");
56         } else if (house.getMoney() <= 0) {
57             System.out.println("House ran out of money! Player wins!");
```

```
58         }  
59  
60         scanner.close();  
61     }  
62 }  
63
```