

```
1 package Game;
2
3 import org.junit.jupiter.api.BeforeEach;
4 import org.junit.jupiter.api.Test;
5
6 import java.util.Scanner;
7
8 import static org.junit.jupiter.api.Assertions.*;
9
10 class ComputerTest {
11
12     private Computer computer;
13     private Deck deck;
14
15     @BeforeEach
16     void setUp() {
17         computer = new Computer("AI Bot");
18         deck = new Deck();
19     }
20
21     @Test
22     void testComputerPlayTurnDrawsUpToThreeCards() {
23         computer.getHand().clear();
24         deck = new Deck();
25         while (!deck.isEmpty()) deck.draw();
26         computer.playTurn(deck, new Scanner(System.in));
27         assertTrue(computer.getHand().size() ≤ 3);
28     }
29
30     @Test
31     void testComputerPlayTurnScoreIncreases() {
32         computer.getHand().clear();
33         computer.getHand().add(new Card(2, Card.Suit.HEARTS));
34         computer.getHand().add(new Card(7, Card.Suit.CLUBS));
35         computer.getHand().add(new Card(10, Card.Suit.SPADES));
36
37         int initialScore = computer.getScore();
38         computer.playTurn(deck, new Scanner(System.in));
39         assertTrue(computer.getScore() > initialScore);
40     }
41
42     @Test
43     void testFindBestCombinationRemovesTwoCards() {
44         computer.getHand().clear();
45         computer.getHand().add(new Card(2, Card.Suit.HEARTS));
46         computer.getHand().add(new Card(9, Card.Suit.DIAMONDS));
47         computer.getHand().add(new Card(5, Card.Suit.CLUBS));
48         computer.getHand().add(new Card(11, Card.Suit.SPADES));
49
50         int handSizeBefore = computer.getHand().size();
51         computer.playTurn(deck, new Scanner(System.in));
52         int handSizeAfter = computer.getHand().size();
53
54         assertTrue(handSizeAfter ≤ 3 && handSizeAfter ≥ 1);
55     }
56
57     @Test
58     void testComputerTurnWithEmptyDeck() {
59         while (!deck.isEmpty()) deck.draw();
60
61         computer.getHand().clear();
62         computer.getHand().add(new Card(3, Card.Suit.HEARTS));
63         computer.getHand().add(new Card(6, Card.Suit.DIAMONDS));
64         computer.getHand().add(new Card(8, Card.Suit.CLUBS));
65         computer.getHand().add(new Card(1, Card.Suit.SPADES));
66
67         computer.playTurn(deck, new Scanner(System.in));
68         assertTrue(computer.getHand().size() ≤ 3);
69     }
70 }
71
```