

```

1 import java.util.Scanner;
2
3 class NumberPuzzleSolver {
4     private int number;
5
6     public NumberPuzzleSolver(int number) {
7         this.number = number;
8     }
9
10    public int solvePuzzle() {
11        if (isValidNumber()) {
12            int difference;
13            if (number > 50) {
14                difference = calculateDifference
15                    ();
16            } else {
17                int reversedNumber =
18                    reverseNumber();
19                difference = calculateDifference
20                    (reversedNumber);
21            }
22            return difference;
23        } else {
24            return -1; // Invalid number
25        }
26    }
27
28    private boolean isValidNumber() {
29        return number >= 10 && number <= 99;
30    }
31
32    private int calculateDifference() {
33        int firstDigit = number / 10;
34        int secondDigit = number % 10;
35        return Math.abs(firstDigit - secondDigit
36            );
37    }
38
39    private int calculateDifference(int
40        reversedNumber) {
41        int firstDigit = reversedNumber / 10;
42        int secondDigit = reversedNumber % 10;
43        return Math.abs(firstDigit - secondDigit
44            );
45    }
46
47    private int reverseNumber() {
48        int reversed = 0;
49        int temp = number;
50        while (temp != 0) {
51            int digit = temp % 10;
52            reversed = reversed * 10 + digit;
53            temp /= 10;
54        }
55        return reversed;
56    }
57 }
58
59 public class Main {
60     public static void main(String[] args) {
61         Scanner scanner = new Scanner(System.in
62             );
63         System.out.print("Enter a two-digit
64             number: ");
65         int inputNumber;
66
67         if (scanner.hasNextInt()) {
68             inputNumber = scanner.nextInt();
69             NumberPuzzleSolver solver = new
70                 NumberPuzzleSolver(inputNumber);
71             int difference = solver.solvePuzzle
72                 ();
73             if (difference == -1) {
74                 System.out.println("Invalid
75                     number");
76             } else {
77                 System.out.println("The
78                     difference is: " +
79                     difference);
80             }
81         } else {
82

```

Enter a two-digit number: 57

The difference is: 2

=== Code Execution Successful ===



Main.java



Run

Output

Clear

```
1 import java.util.Scanner;
2
3 public class NumberNamesPrinter {
4     public static void main(String[] args) {
5         String[] numberNames = {
6             "Zero", "One", "Two", "Three",
7             "Four", "Five", "Six", "Seven",
8             "Eight", "Nine"
9         };
10
11         Scanner scanner = new Scanner(System.in);
12
13         System.out.print("Enter a number (0-9): ");
14
15         int number = scanner.nextInt();
16
17         if (number >= 0 && number <= 9) {
18             System.out.println("The number name
19                 is: " + numberNames[number]);
20         } else {
21             System.out.println("Invalid input.
22                 Please enter a number between 0
23                 and 9.");
24         }
25     }
26 }
```

```
java -cp /tmp/xQyoy2oA81/NumberNamesPrinter
Enter a number (0-9): 8
The number name is: Eight

=== Code Execution Successful ===
```