**SECTION 2: Guess the Output**

**Instructions:**

**1. Perform a Dry Run: Carefully trace the execution of each code snippet manually to determine**

**the output.**

**2. Write Down Your Observations: Document each step of your dry run, including the values of**

**variables at each stage of execution.**

**3. Guess the Output: Based on your dry run, provide the expected output of the code.**

**4. Submit Your Assignment: Provide your dry run steps along with the guessed output for each**

**code snippet.**

**Snippet 1:**

**public class NestedLoopOutput {**

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

**for (int i = 1; i <= 3; i++) {**

**for (int j = 1; j <= 2; j++) {**

**System.out.print(i + " " + j + " ");**

**}**

**System.out.println();**

**}**

**}**

**}**

**// Guess the output of this nested loop.**

1 1 1 2

2 1 2 2

3 1 3 2

**```**

**nippet 2:**

**public class DecrementingLoop {**

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

**int total = 0;**

**for (int i = 5; i > 0; i--) {**

**total += i;**

**if (i == 3) continue;**

**total -= 1;**

**}**

**System.out.println(total);**

**}**

**}**

**// Guess the output of this loop**

**11**

**Snippet 3:**

**public class WhileLoopBreak {**

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

**int count = 0;**

**while (count < 5) {**

**System.out.print(count + " ");**

**count++;**

**if (count == 3) break;**

**}**

**System.out.println(count);**

**}**

**}**

**// Guess the output of this while loop**

**0 1 2**

**3**

**Snippet 4:**

**public class DoWhileLoop {**

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

**int i = 1;**

**do {**

**System.out.print(i + " ");**

**i++;**

**} while (i < 5);**

**System.out.println(i);**

**}**

**}**

**// Guess the output of this do-while loop**

**1 2 3 4**

**5**

**Snippet 5:**

**public class ConditionalLoopOutput {**

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

**int num = 1;**

**for (int i = 1; i <= 4; i++) {**

**if (i % 2 == 0) {**

**num += i;**

**} else {**

**num -= i;**

**}**

**}**

**System.out.println(num);**

**}**

**}**

**// Guess the output of this loop**

**3**

**Snippet 6:**

**public class IncrementDecrement {**

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

**int x = 5;**

**int y = ++x - x-- + --x + x++;**

**System.out.println(y);**

**}**

**}**

**// Guess the output of this code snippet**

**8**

**```**

**Snippet 7:**

**public class NestedIncrement {**

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

**int a = 10;**

**int b = 5;**

**int result = ++a \* b-- - --a + b++;**

**System.out.println(result);**

**}**

**}**

**// Guess the output of this code snippet**

**Final Calculation:**

* **result = 11 \* 5 - 10 + 4**
* **result = 55 - 10 + 4**
* **result = 45 + 4**
* **result = 49**

**LINEWISE KELELE**

**Snippet 8:**

**public class LoopIncrement {**

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

**int count = 0;**

**for (int i = 0; i < 4; i++) {**

**count += i++ - ++i;**

**}**

**System.out.println(count);**

**}**

**}**

**// Guess the output of this code snippet**

**-4**