

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

Snippet 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.

o/p:

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.

Ans: 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.

o/p: 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.

o/p:1

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.

Ans : 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.

Ans: 49

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.

Ans: 4