**Agenda**

• How to print the value in the console?

• Different statements for printing the value in the console?

• Understand the difference between all the print statements

**Key Differences:**

* **print()** → No newline after output.
* **println()** → Adds a newline (\n) after printing.
* **printf()** → Allows formatted output (like %d, %s, %f, etc.).

**%s** → String

**%d** → Integer

**%.2f** → Floating-point with 2 decimal places

**%b** → Boolean

**%c**  → Character

**%n** → Newline (same as \n but platform-independent)

**%tc** → Complete date and time

**%e** → scientific notation

**Difference between print, println, and printf in Java:**

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| **Method** | **Description** | **Example** | | **Output** |
| print() | Prints text on the same line without adding a newline at the end. | |  | | --- | |  |  |  | | --- | | System.out.print("Hello "); System.out.print("World!"); | | Hello World! | |
| println() | Prints text and moves the cursor to the next line. | System.out.println("Hello"); System.out.println("World!"); | Hello  World! | |
| printf() | Formats and prints output using format specifiers. | System.out.printf("Hello %s, you scored %d%%!", "John", 90); | Hello John, you scored 90%! | |

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| --- |
| public class PrintDemo  {  public static void main(String[] args)  {  String name = "John";  int age = 25;  double price = 49.99;  boolean isAvailable = true;  char grade = 'A';  // **Using print()**  System.out.print("Using print(): ");  System.out.print(name);  System.out.print(" is ");  System.out.print(age);  System.out.print(" years old.");  System.out.print("\n"); // Manually adding a new line    // **Using println()**  System.out.println("Using println():");  System.out.println(name + " is " + age + " years old.");  System.out.println("Item price: " + price);  System.out.println("Availability: " + isAvailable);  System.out.println("Grade: " + grade);    // **Using printf()**  System.out.println("Using printf():");  System.out.printf("Name: %s, Age: %d, Price: $%.2f, Available: %b, Grade: %c%n",  name, age, price, isAvailable, grade);  }  } |

**Output:**

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| --- |
| Using print(): John is 25 years old.  Using println():  John is 25 years old.  Item price: 49.99  Availability: true  Grade: A  Using printf():  Name: John, Age: 25, Price: $49.99, Available: true, Grade: A |