Rounding Off

Rounding off means reducing the number of decimal places in a floating-point number while keeping its value as close as possible to the original. It helps in simplifying numbers for readability and precision control.

For example:

- **Original: 12.34567**

- **Rounded to 2 decimal places: 12.35**

Floating-point numbers are decimal values, which can be rounded to n number of decimal places. In Java, rounding off can be done using methods like **format**(), **DecimalFormat**, or **mathematical operations**.

Program

Using format Method

Syntax : System.out.format("%.df" , number);

Parameters: The first parameter accepts **d digits to round off** the number, the second argument accepts a number that is to be rounded.

```java
class Main {
    public static void main(String[] args) {
        double number = 3.141341435;
        System.out.format("%.2f", number);
        // Rounding number to 2 decimal places
        // using format method
    }
}
```