

Clean Java Programs — DisplayPattern and Rectangle

1) DisplayPattern.java

Description: This program displays a simple text pattern in the console.

```
public class DisplayPattern {  
    public static void main(String[] args) {  
        System.out.println("  J   A   V       V   A");  
        System.out.println("  J  A A   V   V   A A");  
        System.out.println("J J AAAAA   V V   AAAAA");  
        System.out.println("JJ A   A       V   A   A");  
    }  
}
```

Compile and Run:

```
javac DisplayPattern.java  
java DisplayPattern
```

Sample Output:

```
  J   A   V       V   A  
  J  A A   V   V   A A  
J J AAAAA   V V   AAAAA  
JJ A   A       V   A   A
```

2) Rectangle.java

Description: This program takes width and height as command-line arguments and calculates the area and perimeter of a rectangle.

```
public class Rectangle {  
    public static void main(String[] args) {  
        if (args.length < 2) {  
            System.out.println("Usage: java Rectangle <width> <height>");  
            return;  
        }  
  
        double width = 0.0;  
        double height = 0.0;  
        try {  
            width = Double.parseDouble(args[0]);  
            height = Double.parseDouble(args[1]);  
        } catch (NumberFormatException e) {  
            System.out.println("Please provide valid numbers for width and height.");  
            return;  
        }  
  
        double area = width * height;  
        double perimeter = 2 * (width + height);
```

```
        System.out.println("Width: " + width);
        System.out.println("Height: " + height);
        System.out.println("Area: " + area);
        System.out.println("Perimeter: " + perimeter);
    }
}
```

Compile and Run Example:

```
javac Rectangle.java
java Rectangle 4.5 7.9
```

Sample Output:

```
Width: 4.5
Height: 7.9
Area: 35.55
Perimeter: 24.8
```