

Sample Problems - Set 1

1. Get two values from the user input, width and length of the rectangle, and calculate the rectangle area using formula $\text{area} = \text{width} * \text{length}$. Output the resulting value showing two digits after the decimal point.

```
import java.util.Scanner;

public class Rectangle {

    public static void main (String[] args) {
        Scanner scanner = new Scanner (System.in);
        System.out.print ("Enter the width:");
        double width = scanner.nextFloat ();
        System.out.print ("Enter the length");
        double length = scanner.nextFloat ();

        double area = width * length

        System.out.printf ("The result area = %.2f ", area);
        scanner.close();
    }
}
```

2. Input three numbers from the user. Use nested "if" statements to print them out in order from the smallest to the largest.

```
import java.util.Scanner;
```

```
public class Order {
```

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

```
        Scanner scanner = new Scanner (System.in);
```

```
        System.out.print("Enter first number");
```

```
        double a = scanner.nextInt();
```

```
        System.out.print("Enter second number");
```

```
        double b = scanner.nextInt();
```

```
        System.out.print("Enter third number");
```

```
        double c = scanner.nextInt();
```

```
        double largest, medium, smallest
```

```
        if (a <= b && a <= c) { } else if (b <= a && b <= c) {
```

```
            smallest = a;
```

```
        } else if (b <= c) {
```

```
            medium = b;
```

```
            largest = c;
```

```
        } else {
```

```
            medium = c;
```

```
            largest = b;
```

```
            smallest = b;
```

```
        } else if (a <= c) {
```

```
            medium = a;
```

```
            largest = c;
```

```
        } else {
```

```
            largest = a;
```

```
            medium = c;
```

```
    } else {
```

```
        smallest = c;
```

```
        if (a <= c) {
```

```
            largest = c;
```

```
            medium = a;
```

```
    } else {
```

```
        medium = b;
```

```
        largest = a;
```

3. Write a loop that prints "Hello WORLD!" 10 times.

```
public class HelloWorld {  
    public static void main() {  
        for (int i = 0; i < 10; i++) {  
            System.out.println("Hello WORLD!");  
        }  
    }  
}
```

4. Use a loop to ask user to input 20 integers, one at a time. Analyze the input as it comes and print out the number only if it is even.

```
import java.util.Scanner;  
  
public class EvenNumbers {  
    public static void main (String[] args) {  
        Scanner scanner = new Scanner (System.in);  
        for (int i = 0; i < 20; i++) {  
            System.out.print ("Please input an integer");  
            int num = scanner.nextInt();  
            if (num % 2 == 0) {  
                System.out.println ("Even number " + num);  
            } else {  
                System.out.println ("Odd number " + num);  
            }  
        }  
    }  
}
```