

OOP LAB ASSIGNMENT

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Task 1:

Write a code to take a number as input from the user and display the square root of that number using a user defined non-static method.

Main.java	Run	Output	Clear
<pre>1 2 import java.lang.Math; 3 class sqr { 4 public static void main(String args[]) 5 { 6 double a = 30; 7 System.out.println(Math.sqrt(a)); 8 a = 45; 9 System.out.println(Math.sqrt(a)); 10 a = 60; 11 System.out.println(Math.sqrt(a)); 12 a = 90; 13 System.out.println(Math.sqrt(a)); 14 } 15 } 16</pre>		<pre>java -cp /tmp/RTY81pMj87 sqr 5.4772255750516616.708203932499369 7.745966692414834 9.486832980505138</pre>	

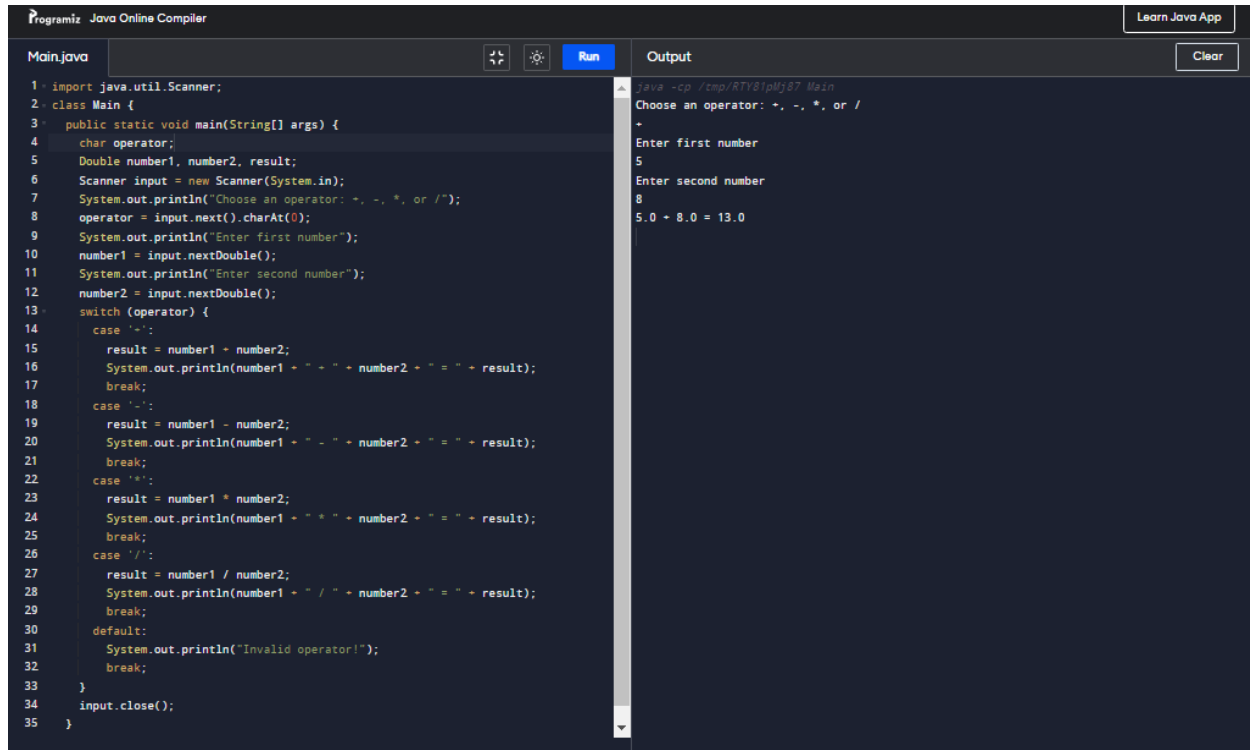
Task 2:

Write a program to take a number as input and print if it is even or odd.

Main.java	Output
<pre>1 import java.util.Scanner; 2 3 public class EvenOdd { 4 public static void main(String[] args) { 5 Scanner reader = new Scanner(System.in); 6 System.out.print("Enter a number: "); 7 int num = reader.nextInt(); 8 if(num % 2 == 0) 9 System.out.println(num + " is even"); 10 else 11 System.out.println(num + " is odd"); 12 } 13 }</pre>	<pre>java -cp /tmp/RTY81pMj87 EvenOdd Enter a number: 5 5 is odd</pre>

Task 3:

Write a program to take input from user and make decision for calculation based on input of
+, -, *, /.



The screenshot shows a Java Online Compiler interface with a dark theme. The left pane, titled 'Main.java', contains the source code for a program that takes two numbers and an operator as input and performs a calculation. The right pane, titled 'Output', shows the program's execution results.

```
1 import java.util.Scanner;
2 class Main {
3     public static void main(String[] args) {
4         char operator;
5         Double number1, number2, result;
6         Scanner input = new Scanner(System.in);
7         System.out.println("Choose an operator: +, -, *, or /");
8         operator = input.next().charAt(0);
9         System.out.println("Enter first number");
10        number1 = input.nextDouble();
11        System.out.println("Enter second number");
12        number2 = input.nextDouble();
13        switch (operator) {
14            case '+':
15                result = number1 + number2;
16                System.out.println(number1 + " + " + number2 + " = " + result);
17                break;
18            case '-':
19                result = number1 - number2;
20                System.out.println(number1 + " - " + number2 + " = " + result);
21                break;
22            case '*':
23                result = number1 * number2;
24                System.out.println(number1 + " * " + number2 + " = " + result);
25                break;
26            case '/':
27                result = number1 / number2;
28                System.out.println(number1 + " / " + number2 + " = " + result);
29                break;
30            default:
31                System.out.println("Invalid operator!");
32                break;
33        }
34        input.close();
35    }
}
```

The output pane shows the following text:

```
java -cp /tmp/8TY81pWj87 Main
Choose an operator: +, -, *, or /
+
Enter first number
5
Enter second number
8
5.0 + 8.0 = 13.0
```