Java Program: Basic Calculator

```java
package calculator;
import java.util.Scanner;
public class BasicCalculator {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        double result = 0;
        boolean firstTime = true;
        System.out.println("---- Calculator ----");

        while (true) {
            if (firstTime) {
                System.out.print("num: ");
                double num1 = sc.nextDouble();

                System.out.print("op (+ - * / %): ");
                char op = sc.next().charAt(0);

                System.out.print("num: ");
                double num2 = sc.nextDouble();

                result = calculate(num1, num2, op);
                System.out.println(result);
                firstTime = false;
            }

            System.out.print("op (+ ,-,*,/,%,=) : ");
            char op = sc.next().charAt(0);
            if (op=='=') {
                System.out.println("final result: " + result);
                firstTime = true; // reset for new calculation
                continue;
            } else {
                System.out.print("num: ");
                double num = sc.nextDouble();
                result = calculate(result, num, op);
                System.out.println(result);
            }
        }
    }

    private static double calculate(double a, double b, char op) {
        switch (op) {
            case '+': return a + b;
            case '-': return a - b;
            case '*': return a * b;
            case '/':
                if (b != 0) return a / b;
                else {
                    System.err.println("error: divide by 0");
                    return a;
                }
            case '%':
                if (b != 0) return a % b;
                else {
                    System.err.println("error: modulus by 0");
                    return a;
                }
            default:
                System.out.println("invalid operator");
                return a;
        }
    }
}
```