

```
import java.lang.Math;
import java.util.Scanner;

/**
 * This program uses several math methods to display results.
 * (e.g. pow, max, min, round)
 *
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 * @version v100
 */
public class w8
{
    public static void main( String[] args )
    { //main
        Scanner keybd = new Scanner(System.in);

        //Display the result 10^3
        int a = 10;
        int b = 3;
        System.out.println(a + " to the power " + b + " is: " + (int)Math.pow(a, b));

        //Round to the nearest whole number (note using a cast to display only the whole number)
        double x = 3.4;
        double result1 = Math.round(x);
        System.out.println( x + " rounded to nearest whole number is: " + (int)result1);

        //Round to the nearest whole number
        double y = 3.6;
        double result2 = Math.round(y);
        System.out.println( y + " rounded to nearest whole number is: " + (int)result2);

        //Ask the user for 3 numbers
        double num1, num2, num3, biggest, smallest, middle, temp;
        System.out.println("\n\n");
        System.out.println("Please enter 3 unique numbers:");
        System.out.print("Enter number #1 > ");
        num1 = keybd.nextDouble();
        System.out.print("Enter number #2 > ");
        num2 = keybd.nextDouble();
        System.out.print("Enter number #3 > ");
        num3 = keybd.nextDouble();
        System.out.println("You entered: " + num1 + " " + num2 + " " + num3);
        System.out.println("\n\n");

        //Display the biggest, smallest and middle number
        temp = Math.max(num1,num2);
        biggest = Math.max(temp,num3);
        System.out.println("the largest number was: " + biggest);

        temp = Math.min(num1,num2);
        smallest = Math.min(temp,num3);
        System.out.println("the smallest number was: " + smallest);

        middle = num1 + num2 + num3 - biggest - smallest;
        System.out.println("the middle number was: " + middle);

    } //main
}
```