

// CPS109 Ferworn's Java types and input code example--Fall 13

```
import java.util.Scanner;
public class Javamath
{
    public static void main(String[] args)
    {
        Scanner in = new Scanner(System.in);
        final double SIGDIG = 2.0;

        System.out.println("Enter an integer "); // INTEGER STUFF
        int ival = in.nextInt();
        System.out.println("Enter another integer ");
        int ival1 = in.nextInt();
        System.out.println("The first integer is: " + ival);
        System.out.println("The second integer is: " + ival1);
        System.out.println("The integers before and after " +
            ival + " are " + (ival-1) + " and " + (ival+1));
        System.out.println("first / second: " + ival/ival1);
        System.out.println("first % second: " + ival%ival1);
        System.out.println("first as a real number: " + ival * 1.0);

        System.out.println("Enter a Double "); //DOUBLE STUFF
        double anotherdval = in.nextDouble();
        System.out.println("The double was: " + anotherdval);
        double dtemp = (int) (anotherdval * Math.pow(10.0,SIGDIG) + 0.5)/
            Math.pow(10.0,SIGDIG);
        System.out.println("Rounded double to SIGDIG: " + dtemp);
        System.out.println("Rounded into an integer: " +
            Math.round(anotherdval));

        System.out.println("Enter a character "); //CHAR STUFF
        String tempstring;
        tempstring = in.next();
        char cval = tempstring.charAt(0);
        System.out.println("The char is: " + cval);
        System.out.println("The integer value of the character is: "
            + (int) cval);
        System.out.println("Another way of printing out its int val is: "
            + (cval + 0));
        System.out.println("The char before and after that character are: " +
            (char) (cval-1) + " and " + (char) (cval+1));

        System.out.println("Enter a string "); //STRING STUFF
        String sinput = in.next();
        System.out.println("The string you entered is: " + sinput);
        System.out.println("Its length is: " + sinput.length());
        System.out.println("Its first character is: " +
            sinput.charAt(0));
        System.out.println("Its last character is: " +
            sinput.charAt(sinput.length()-1));
        System.out.println("The first two characters are: " +
            sinput.substring(0,2));
    }
}
```

