

Example 1

```
/**
 * Write a description of class Example1 here.
 *
 * dominguez
 */
import java.util.*;
public class Example1
{
    public static void main( String args[] )
    {
        System.out.println("\n" + "Hello, it's: " + (new Date()) );
        System.out.print("Enter the value of x ...");
        int x = SavitchIn.readLineInt();
        System.out.print("Enter the value of y ...");
        int y = SavitchIn.readLineInt();
        int z = x + y;
        System.out.println( x + " plus " + y + " equals " + z );
        System.out.println( x + " minus " + y + " equals " + (x-y) );
        System.out.print("The square root of the quantity (x plus y) is " +
            Math.sqrt(z));
    }
}
```

SCREEN (CONSOLE) OUTPUT

```
Hello, it's: Thu Aug 26 13:15:47 PDT 2010
Enter the value of x ...14
Enter the value of y ...-5
14 plus -5 equals 9
14 minus -5 equals 19
The square root of the quantity (x plus y) is 3.0
```

## Example 2

```
/**
 * Write a description of class Example2 here.
 *
 * dominguez
 */
import java.util.*;
public class Example2
{
    public static void main( String args[] )
    {
        System.out.println("\n" + "Hello, it's: " + (new Date()) );
        System.out.print("Enter the value of x ...");
        int x = SavitchIn.readLineInt();
        System.out.print("Enter the value of y ...");
        int y = SavitchIn.readLineInt();

        if( x > y ) System.out.print( "x is greater than y" );
        else System.out.print( "y is greater than x" );

        /*
         * this would also work:
         *
         * if( x > y ) System.out.print( x + " is greater than " + y );
         * if( x < y ) System.out.print( y + " is greater than " + x );
         */
    }
}
```

### SCREEN (CONSOLE) OUTPUT

```
Hello, it's: Thu Aug 26 13:37:09 PDT 2010
Enter the value of x ...57
Enter the value of y ...98
y is greater than x
```

### Example 3

```
/**
 * Write a description of class Example3 here.
 *
 * dominguez
 */
import java.util.*;
public class Example3
{
    public static void main( String args[] )
    {
        System.out.println("\n" + "Hello, it's: " + (new Date()) );
        System.out.print("Enter the value of x ...");
        int x = SavitchIn.readLineInt();
        System.out.print("Enter the value of y ...");
        int y = SavitchIn.readLineInt();
        System.out.print("Enter the value of w ...");
        int w = SavitchIn.readLineInt();

        int biggest=0;

        if( x > y && x > w ) biggest = x;
        if( y > x && y > w ) biggest = y;
        if( w > x && w > y ) biggest = w;

        System.out.println( "\n" + "The largest of the three numbers is " +
                            biggest );
    }
}
```

### OUTPUT

```
Hello, it's: Thu Aug 26 14:23:54 PDT 2010
Enter the value of x ...-13
Enter the value of y ...9
Enter the value of w ...5
```

```
The largest of the three numbers is 9
```

## Example 4

```
/**
 * Write a description of class Example4 here.
 *
 * dominguez
 */
public class GreetingDriver
{
    public static void main( String args[] )
    {
        Greeting hola = new Greeting();
        hola.printHello();
    }
}

import java.util.*;
public class Greeting
{
    private String name;

    public Greeting()
    {
        System.out.print("What is your name? . . .");
        name = SavitchIn.readLine();
    }

    public void printHello()
    { System.out.println("\n" + "Hello " + name + ", it's: " +
        (new Date()) ); }
}
```

## OUTPUT

What is your name? . . .tom

Hello tom, it's: Tue Aug 31 15:50:17 PDT 2010

## Example 5

```
/**
 * Write a description of class Example5 here.
 *
 * dominguez
 */
public class GreetingDriver
{
    public static void main( String args[] )
    {
        Greeting hola = new Greeting();

        hola.printHello();

        System.out.println();

        String nombre = hola.getName();

        System.out.print("The name is " + nombre + "\n");

        //This would also work:
        System.out.print("The name is " + hola.getName());
    }
}

import java.util.*;
public class Greeting
{
    private String name;

    public Greeting()
    {
        System.out.print("What is your name? . . .");
        name = SavitchIn.readLine();
    }

    public void printHello()
    { System.out.println("\n" + "Hello " + name + ", it's: " +
        (new Date()) ); }

    public String getName()
    { return name; }
}
```

## OUTPUT

What is your name? . . .Tom

Hello Tom, it's: Tue Aug 31 16:05:00 PDT 2010

The name is Tom

The name is Tom

## Exercises

1. Modify class Example1 to accomplish the outputs shown below.

```
Hello, it's: Thu Aug 26 13:19:34 PDT 2010
Enter the value of x ...9
Enter the value of y ...2
Enter the value of r ...13
9 + 2 + 13 = 24
The square root of the quantity (x + y + r) is 4.898979485566356
```

```
Hello, it's: Thu Aug 26 13:18:15 PDT 2010
Enter the value of x ...8
Enter the value of y ...-3
Enter the value of r ...-7
8 + -3 + -7 = -2
The square root of the quantity (x + y + r) is NaN
```

2. Modify class Example2 to accomplish the output shown below. Use `Math.abs(num)` to obtain the absolute value of a number (in this case the number is stored in variable `num`).

```
Hello, it's: Thu Aug 26 14:13:18 PDT 2010
Enter the value of x ...-23
Enter the value of y ...14
the absolute value of x is greater than the absolute value of y
```

3. Modify class Example3 to accomplish the output shown below.

```
Hello, it's: Thu Aug 26 14:02:55 PDT 2010
Enter the value of x ...-5
Enter the value of y ...13
Enter the value of w ...9

In order from least to greatest: -5 9 13
```

4. Modify classes `GreetingDriver` (as shown below) and `Greeting` in Example4 to produce the output shown.

```
public class GreetingDriver
{
    public static void main( String args[] )
    {
        Greeting hola = new Greeting();
        hola.printHello();
        hola.printDate();
    }
}
```

```
What is your name? ...Tom
Hello Tom, it's: Tue Aug 31 16:29:13 PDT 2010
Today's date is: Tue Aug 31 16:29:13 PDT 2010
```