

This document contains examples for the touch and color sensors: An example for the touch sensor, how to fetch the data and check if it is pressed: All sensors in leJOS will use this format, the sample size and composition may differ however. Code :

```
//Import libraries
import lejos.hardware.port.SensorPort;
import lejos.hardware.sensor.EV3TouchSensor;

//Make A Class To Hold Our Example Method.
class TouchSampleExample {
    /*
     * The example method, returns true if on time of calling the touch sensor connected
     * to.
     * port 1 is pressed.
     */
    EV3TouchSensor touch;
    float[] sample;
    public TouchSampleExample(){
        // Assign the touch sensor to class variable.
        touch = new EV3TouchSensor(SensorPort.S1);
        /*
         * Assigns space to hold the data from the touch sample.
         * We want the space (length of the array of floats) to be the size of the
         sample
         * our sensors will give us.
         * We want to use a float because the sample can be a decimal number.
         * For more information on sample sizes and composition see the API (a link
         is
         * provided in practical aid 1).
         */
        sample = new float[touch.sampleSize()];
    }

    public boolean checkTouched() {

        /*
         * Get the actual sample from the sensor.
         * When you call this method the sensor data
         * will be stored in the previously created float[].
         */
        touch.fetchSample(sample, 0);
        /*
         * Check if the data has a particular value.
         * For the touch sensor this is the first value of the sample array.
         */
        if (sample[0] == 1) {
            return true;
        }
        return false;
    }
}
```

Example for the color sensor :

```
//Import libraries
import lejos.hardware.port.SensorPort;
import lejos.hardware.sensor.EV3ColorSensor;
import lejos.robotics.SampleProvider;

class ColorSampleExample {
    /*
     * Initialize class variables.
     */
    EV3ColorSensor colorSensor;
    SampleProvider redProvider;
    SampleProvider rgbProvider;
    float[] redSample;
    float[] rgbSample;

    public ColorSampleExample(){
        /*
         * The color sensor has multiple methods of retrieving information
         * We can get the red mode, this is how much light reflects from a red
         spotlight.
         * We can get the rgb mode, this is the rgb value of whatever the sensor is
         looking at.
         * Here we assign these modes and the sensor to the class variables.
         * We want to use a float because the sample can be a decimal number.
         * For more information on sample sizes and composition see the API(a link
         is
         * provided in practical aid 1).
         * Note that the color ID we use later is retrieved directly from the
         sensor.
         */
        colorSensor = new EV3ColorSensor(SensorPort.S2);
        redProvider = colorSensor.getRedMode();
        rgbProvider = colorSensor.getRGBMode();
        redSample = new float[redProvider.sampleSize()];
        rgbSample = new float[rgbProvider.sampleSize()];
    }
    public int colorID() {
        //Get the color ID from the sensor and return it to the caller.
        return colorSensor.getColorID();
    }
    public float[] redSample(){
        //Get the red mode sample and return it to the caller.
        redProvider.fetchSample(redSample, 0);
        return redSample;
    }
    public float[] rgbSample(){
        //Get the RGB sample and return it to the caller.
        rgbProvider.fetchSample(rgbSample, 0);
        return rgbSample;
    }
}
```