Laboratorio4

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Chapter 1

File Index

1.1 File List

Here is a list of all files with brief descriptions:

Chapter 2

File Documentation

2.1 src/main.cpp File Reference

```
#include <Arduino.h>
```

Functions

- void setup ()
- void loop ()

Variables

- int buttonPin = A5
- int PinYellow = 8
- int PinGreen = 9
- int PinRed = 10
- char intPin
- int cant
- char flag
- int state

2.1.1 Function Documentation

2.1.1.1 loop()

```
void loop ( )
```

Definition at line 22 of file main.cpp.

```
23 {
24   // Se verifica si hay dato de entrada
25   if (Serial.available() > 0)
26   {
27       //Se lee el dato de entrada
28       intPin = Serial.read();
29
30       switch(intPin)
31       {
32         case's':
33           digitalWrite(PinRed, LOW);
34           digitalWrite(PinGreen, LOW);
35           digitalWrite(PinYellow, HIGH);
36           flag = 's';
37           break;
38
39         case'r':
40           digitalWrite(PinRed, LOW);
41           digitalWrite(PinGreen, HIGH);
42           digitalWrite(PinYellow, LOW);
43           flag = 'r';
44           break;
45
46         case'S':
47           Serial.write(cant);
48           digitalWrite(PinRed, HIGH);
49           digitalWrite(PinGreen, LOW);
50           digitalWrite(PinYellow, LOW);
51           flag = 'S';
52           cant = 0;
53           break;
54
55         default:
56           digitalWrite(PinRed, LOW);
57           digitalWrite(PinGreen, LOW);
58           digitalWrite(PinYellow, LOW);
59           break;
60       }
61   }
62   else
63   {
64     if (flag == 'r')
65       {
66         state = digitalRead(buttonPin);
67         if (state == 1)
68         {
69           cant = cant + 1;
70         }
71         while(digitalRead(buttonPin)==1)
72         {
73         }
74         while(digitalRead(buttonPin)==0)
75         {
76         }
77       }
78   }
79 }
```

2.1.1.2 setup()

```
void setup ( )
```

Definition at line 12 of file main.cpp.

```
13 {
14   // Configuración de pines:
15   Serial.begin(9600);
16
17   pinMode(buttonPin, INPUT);
18   pinMode(PinYellow, OUTPUT);
19   pinMode(PinGreen, OUTPUT);
20   pinMode(PinRed, OUTPUT);
21 }
```

2.1.2 Variable Documentation

2.1.2.1 buttonPin

```
int buttonPin = A5
```

Definition at line 3 of file main.cpp.

2.1.2.2 cant

```
int cant
```

Definition at line 8 of file main.cpp.

2.1.2.3 flag

```
char flag
```

Definition at line 9 of file main.cpp.

2.1.2.4 intPin

```
char intPin
```

Definition at line 7 of file main.cpp.

2.1.2.5 PinGreen

```
int PinGreen = 9
```

Definition at line 5 of file main.cpp.

2.1.2.6 PinRed

```
int PinRed = 10
```

Definition at line 6 of file main.cpp.

2.1.2.7 PinYellow

```
int PinYellow = 8
```

Definition at line 4 of file main.cpp.

2.1.2.8 state

```
int state
```

Definition at line 10 of file main.cpp.