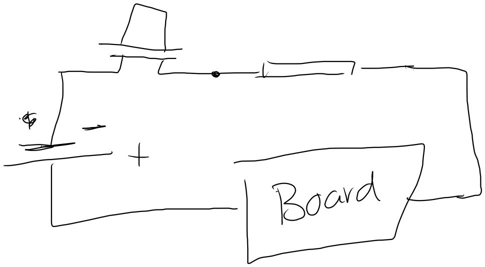
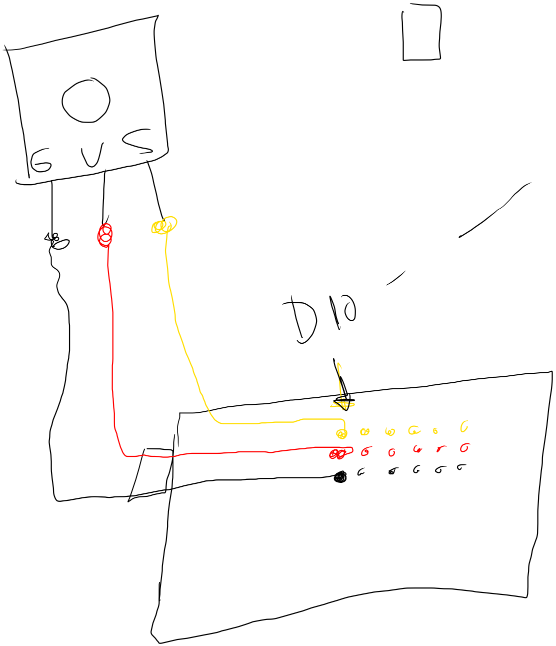
Link documentación:

https://atigra.es/documentacion-cursos-erasmus/

Button





Reto: Convertir pulsador en interruptor.

Pulsar boton enciende

vuelvo a pulsar apaga

pista: usar variable

pista 2: la variable sirve para guardar el estado del led (on/off) pista 3 :

¿push button? → si

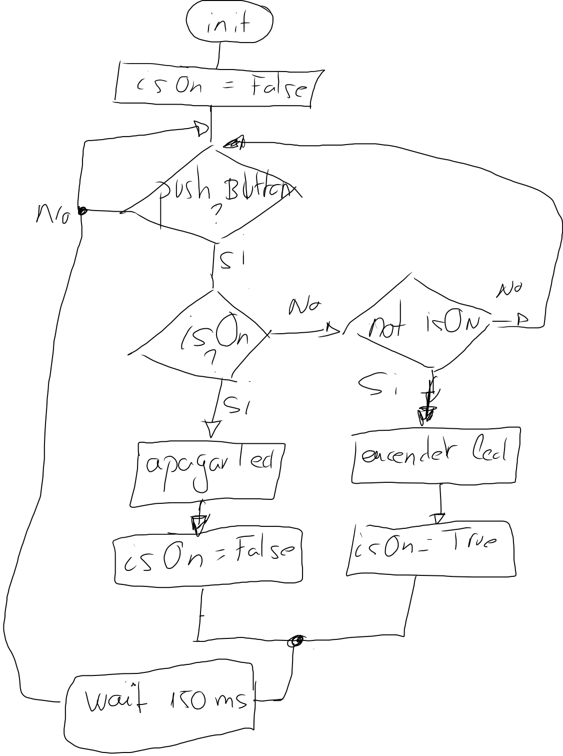
¿led encendido? ←

si — apagar led

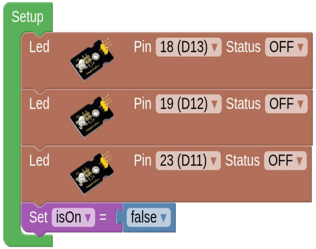
no — encender led

pista 4 : ¿Cuál es la variable?

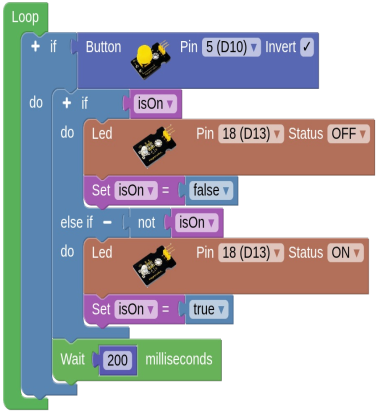
led encendido → isOn


init
isOn = False
push Button ?
No
si
isOn ?
No
not isOn
No
si
si
apagar led
encender led
isOn = False
isOn = True
wait 150 ms

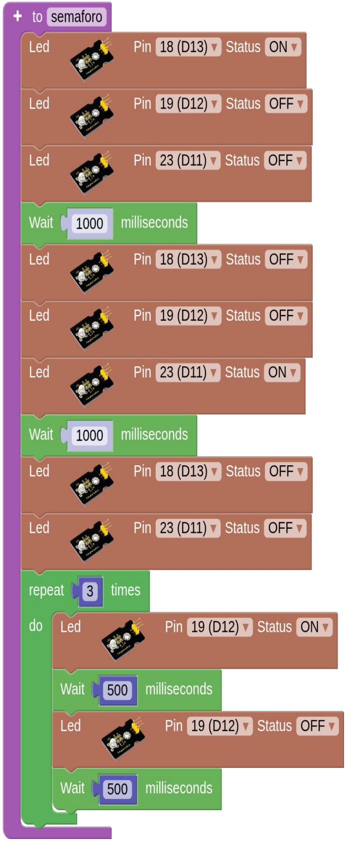
Solución reto: Convertir botón en interruptor



```
Setup
  Led Pin 18 (D13) Status OFF
  Led Pin 19 (D12) Status OFF
  Led Pin 23 (D11) Status OFF
  Set isOn = false
```

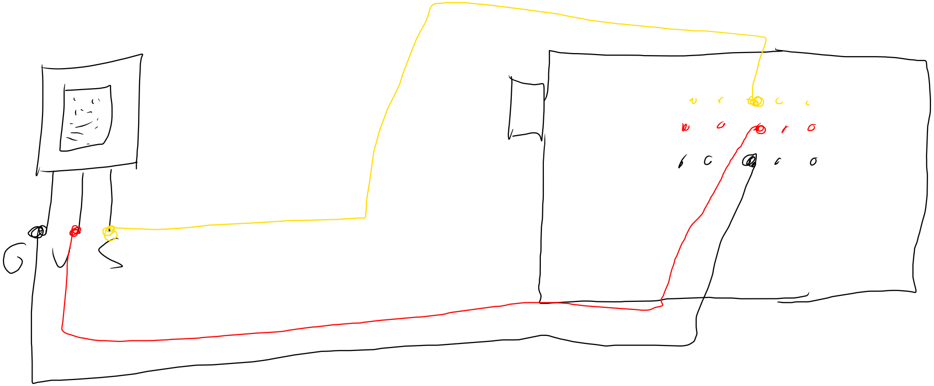


```
Loop
  if Button Pin 5 (D10) Invert ✓
  do
    if isOn
    do
      Led Pin 18 (D13) Status OFF
      Set isOn = false
    else if not isOn
    do
      Led Pin 18 (D13) Status ON
      Set isOn = true
    Wait 200 milliseconds
```



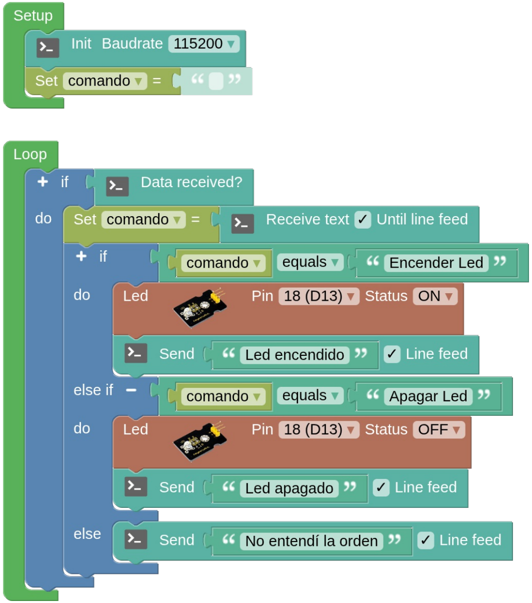
```
to semaforo
  Led Pin 18 (D13) Status ON
  Led Pin 19 (D12) Status OFF
  Led Pin 23 (D11) Status OFF
  Wait 1000 milliseconds
  Led Pin 18 (D13) Status OFF
  Led Pin 19 (D12) Status OFF
  Led Pin 23 (D11) Status ON
  Wait 1000 milliseconds
  Led Pin 18 (D13) Status OFF
  Led Pin 23 (D11) Status OFF
  repeat 3 times
  do
    Led Pin 19 (D12) Status ON
    Wait 500 milliseconds
    Led Pin 19 (D12) Status OFF
    Wait 500 milliseconds
```

Sensor DHT11 (Temp | Hum)



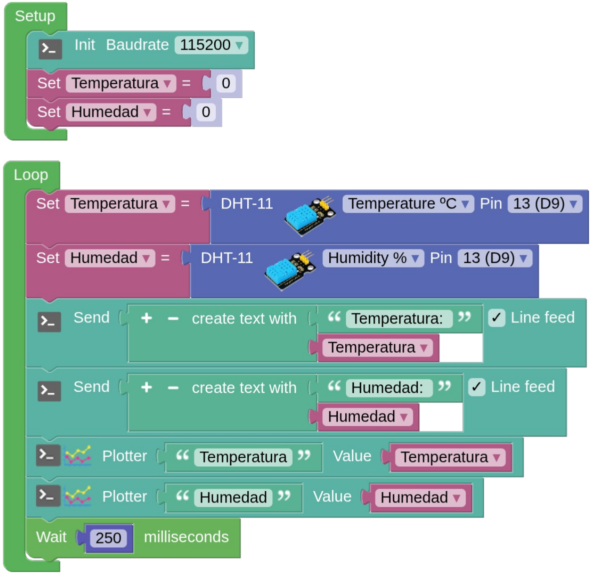
temp	°C
hum	%

Acceso a Consola - Encender y apagar led



```
Setup
  Init Baudrate 115200
  Set comando = " "
Loop
  if Data received?
  do Set comando = Receive text ✓ Until line feed
     if comando equals "Encender Led"
     do Led Pin 18 (D13) Status ON
        Send "Led encendido" ✓ Line feed
     else if comando equals "Apagar Led"
     do Led Pin 18 (D13) Status OFF
        Send "Led apagado" ✓ Line feed
     else Send "No entendí la orden" ✓ Line feed
```

Temperatura y Humedad por consola serie



```
Setup
  Init Baudrate 115200
  Set Temperatura = 0
  Set Humedad = 0
Loop
  Set Temperatura = DHT-11 Temperature ºC Pin 13 (D9)
  Set Humedad = DHT-11 Humidity % Pin 13 (D9)
  Send create text with "Temperatura:"
                        Temperatura      ✓ Line feed
  Send create text with "Humedad:"
                        Humedad          ✓ Line feed
  Plotter "Temperatura" Value Temperatura
  Plotter "Humedad" Value Humedad
  Wait 250 milliseconds
```