

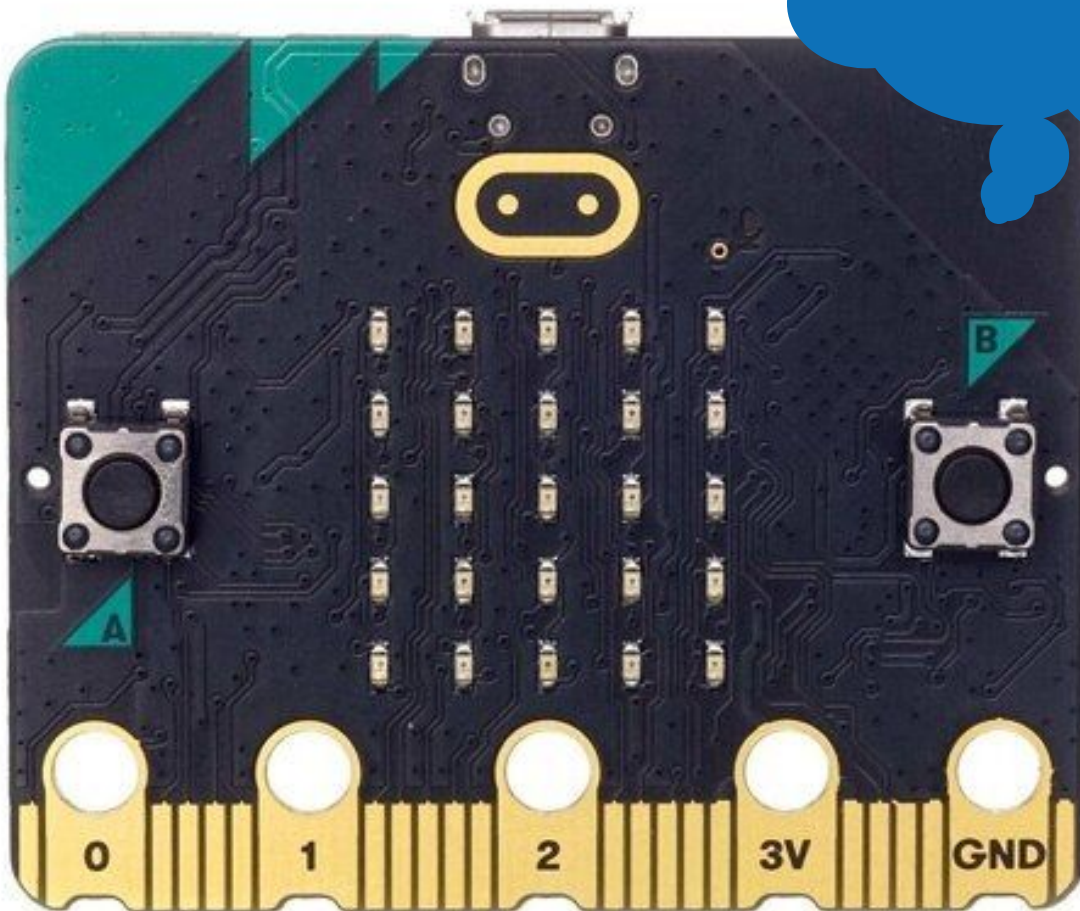
# MICRO:BIT

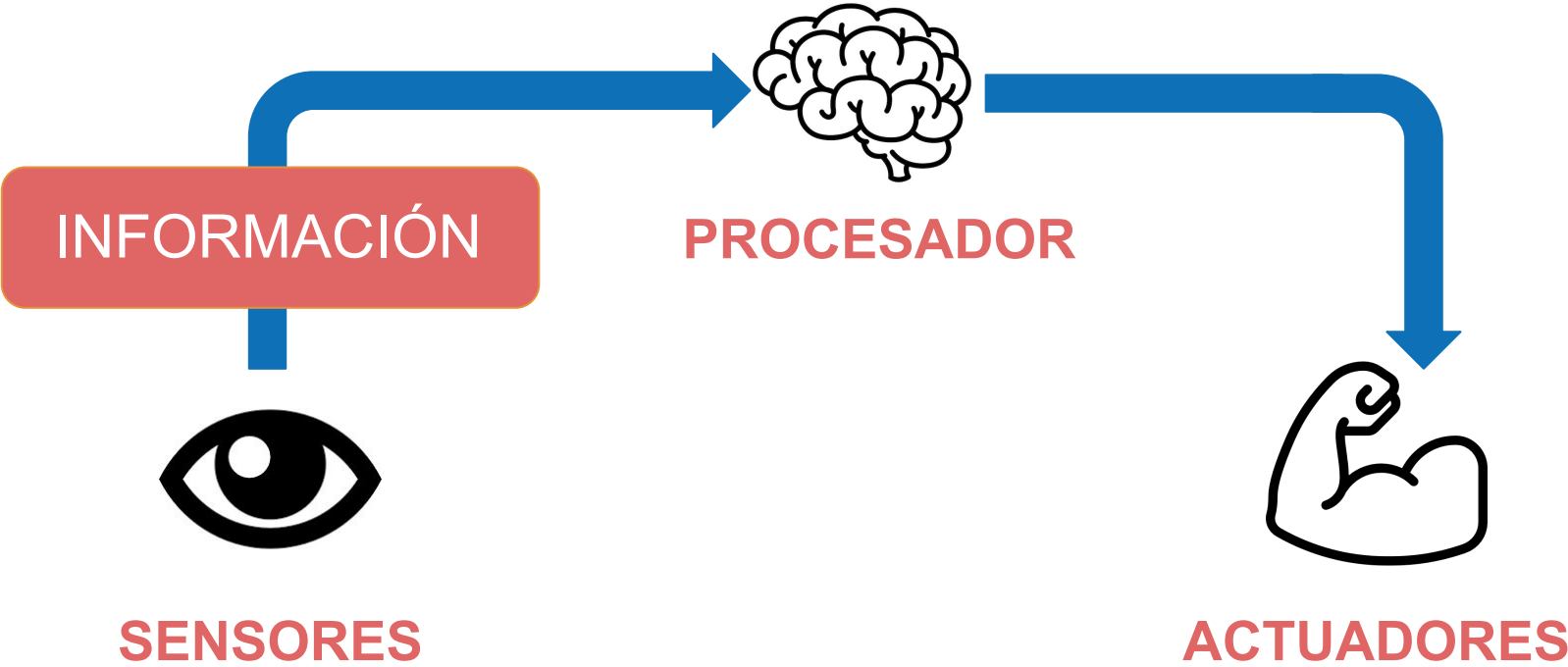


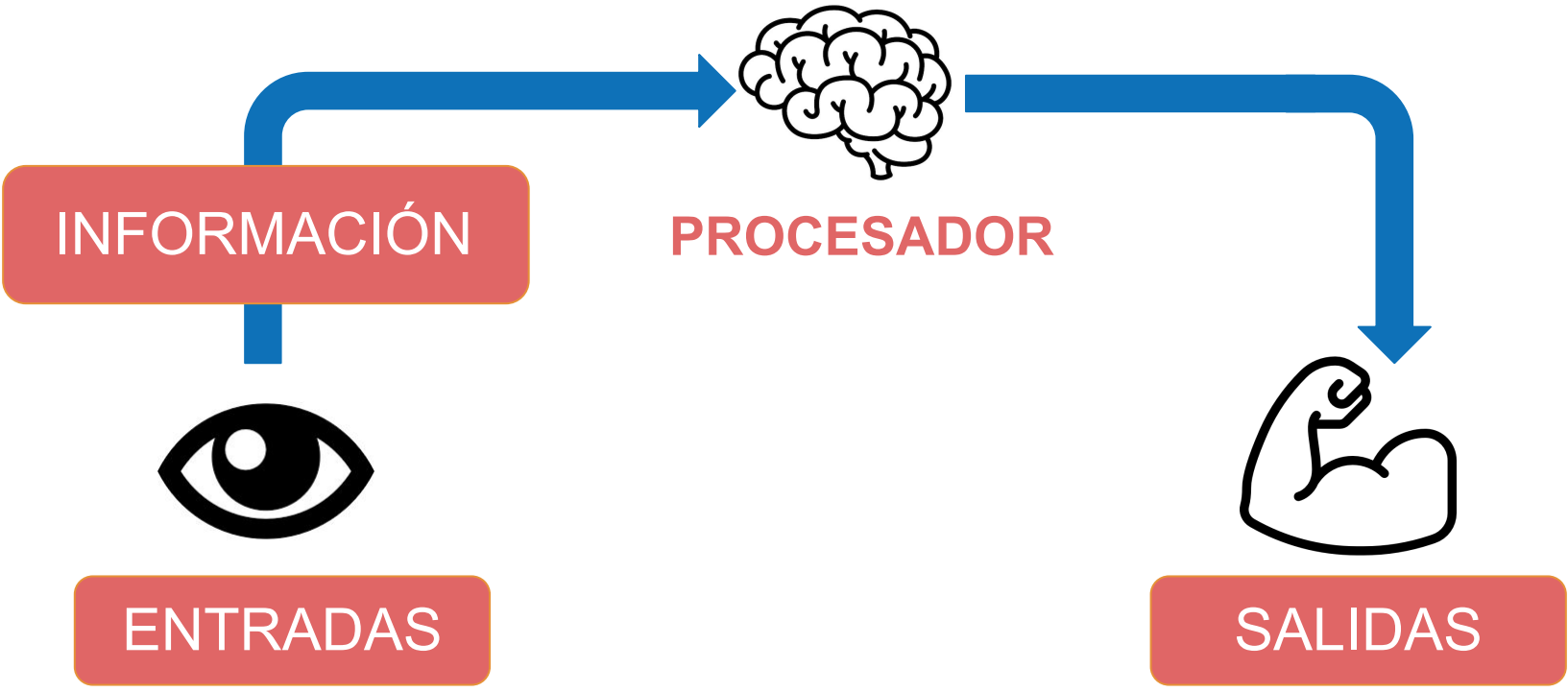
**MAKER STORE**

by ALLNET

SON UN ROBOT?



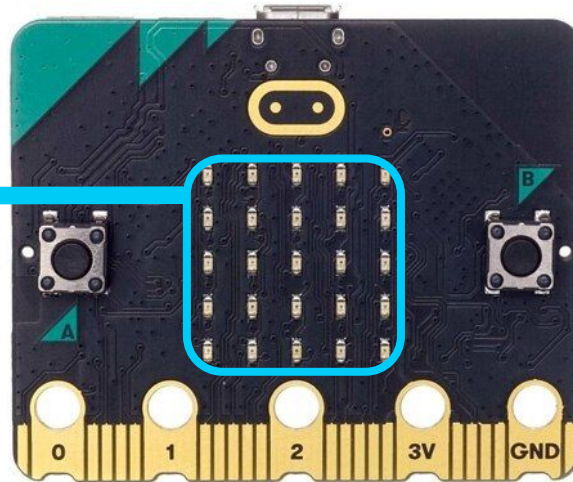






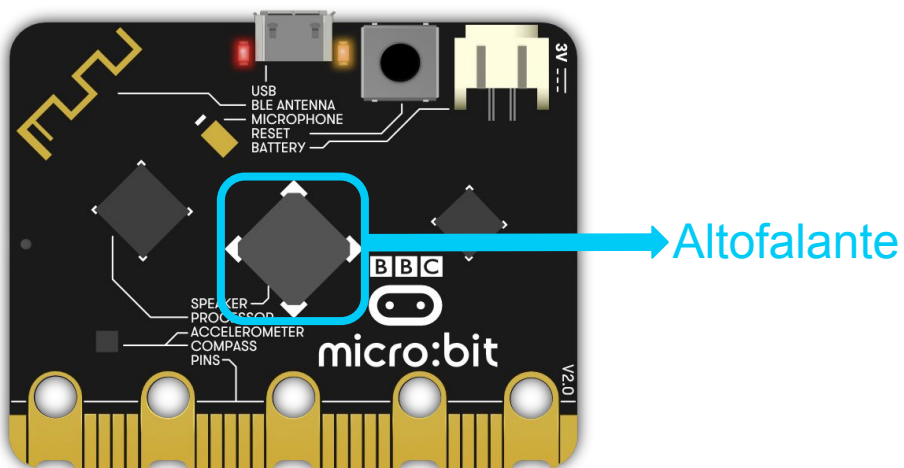
## Actuadores - Saídas

Matriz de LEDs 5x5



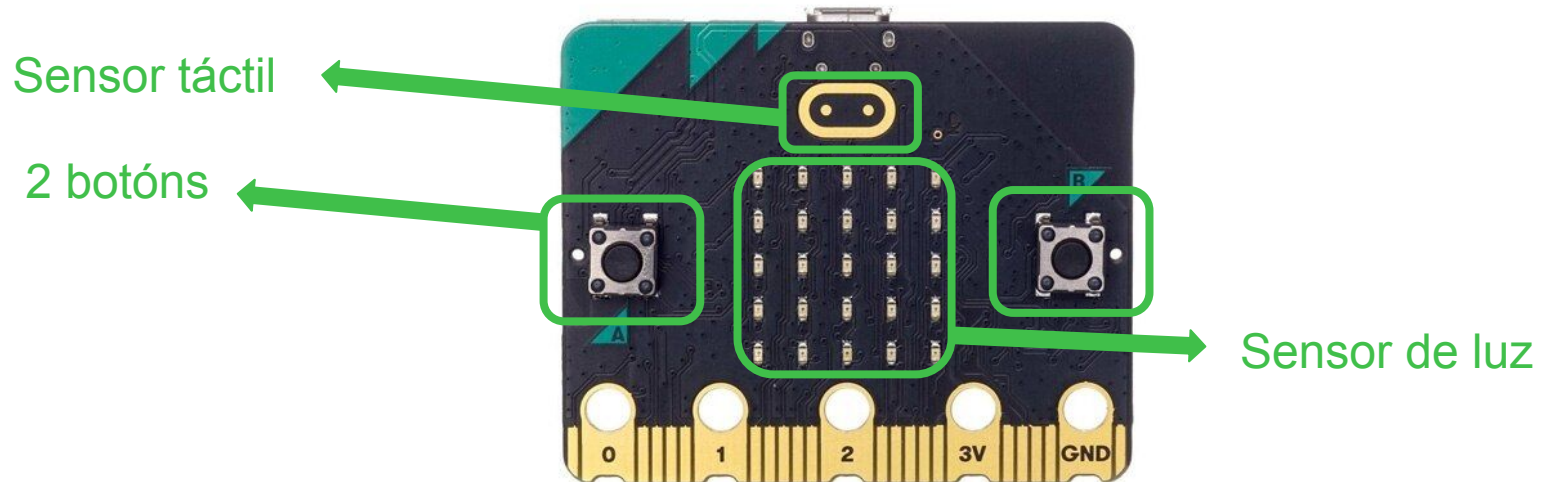


## Actuadores - Saídas



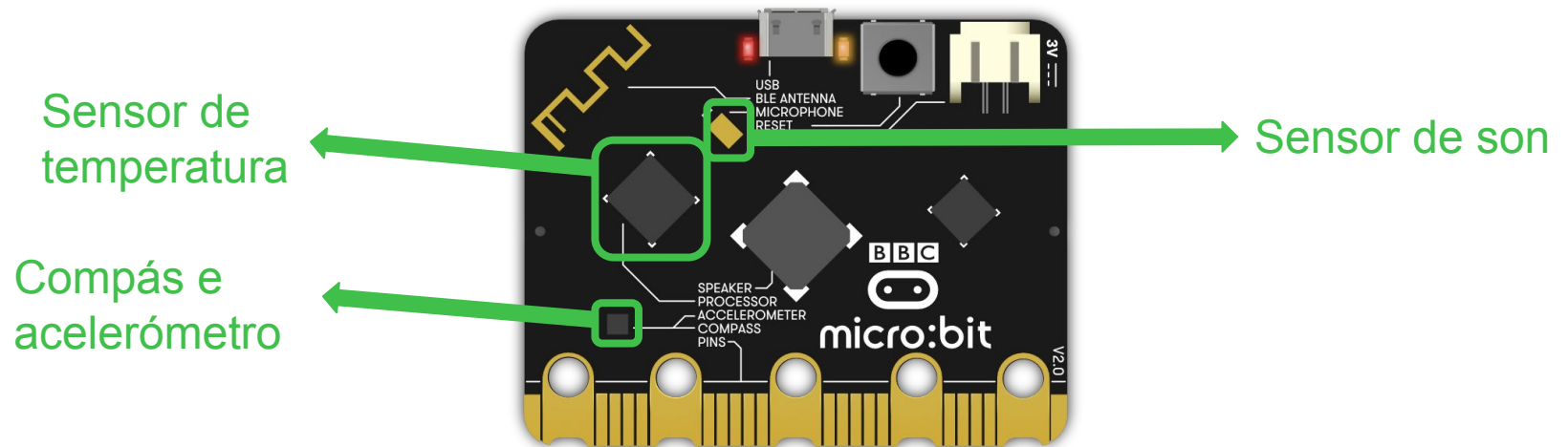


## Sensores - Entradas





## Sensores - Entradas

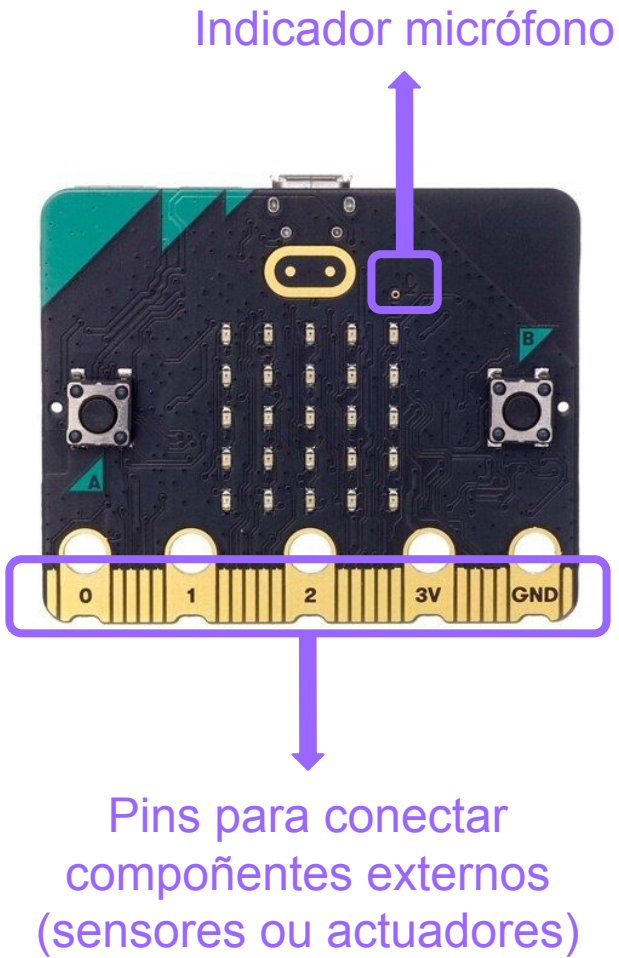


Sensor de temperatura

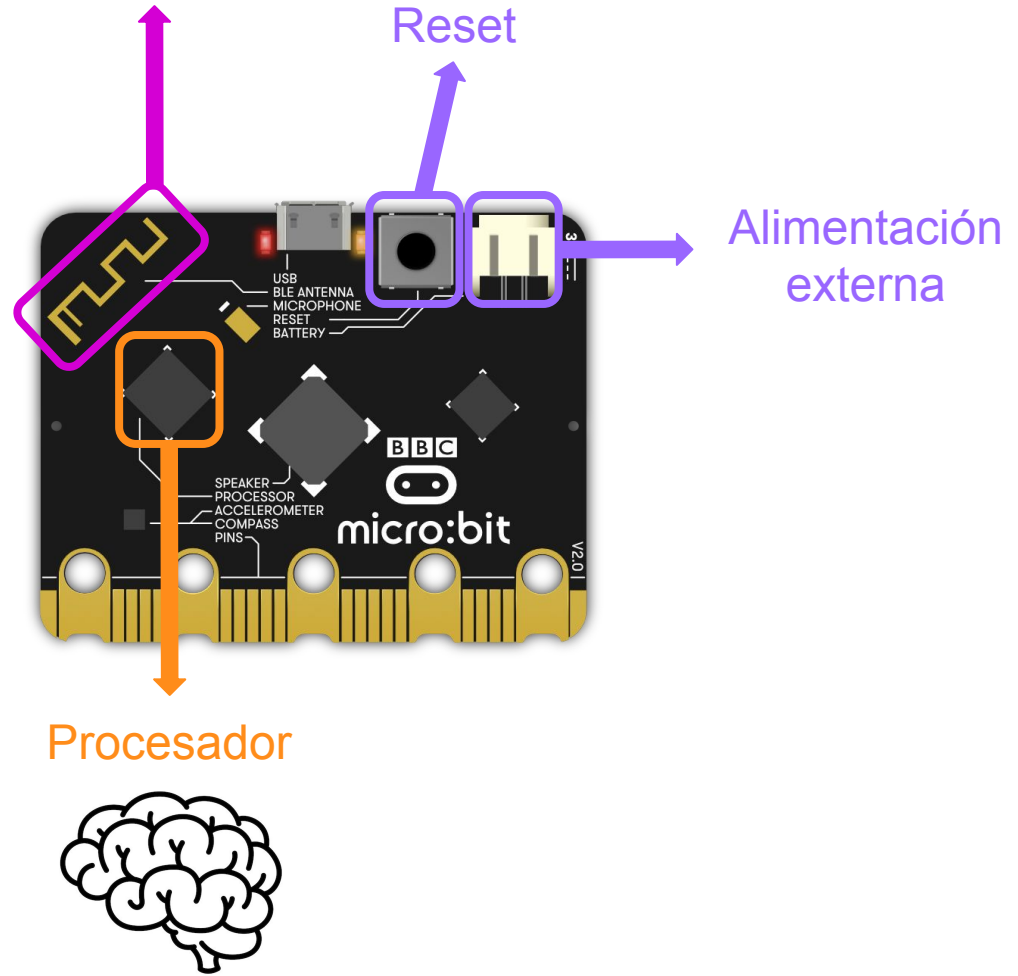
Sensor de son

Compás e acelerómetro





Radio e bluetooth





# Que é programar?

Crear

un conxunto de instrucións

para lograr un obxectivo

## OBJECTIVO



## LAVAR OS DENTES

PASO 1

PASO 2

PASO 3

PASO 4

## ALGORITMO

### INSTRUCCIONES

- Ordeadas
- Ben definidas



# Que imos facer agora?

CREAR ALGORITMOS



# A treballar!



microbit



Micro:bit Educational Foundation

<https://microbit.org> > es-es



**Micro:bit Educational Foundation | micro:bit**

El BBC **micro:bit**: el ordenador de bolsillo que transforma el aprendizaje de las competencias digitales.

[Vamos a programar](#) · [Características](#) · [Make it: code it](#) · [Productos oficiales](#)



Microsoft MakeCode for micro:bit

<https://makecode.microbit.org> · [Traducir esta página](#) ·

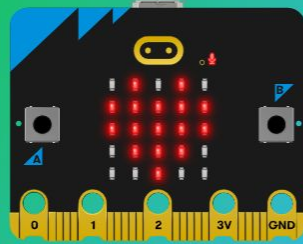
**Microsoft MakeCode for micro:bit**

A Blocks / JavaScript code editor for the **micro:bit** powered by Microsoft MakeCode.

[USB](#) · [Reference](#) · [Blocks language](#) · [Pairing via Bluetooth](#)



## BBC micro:bit



Crea | Aprende | Programa

La computadora de bolsillo que transforma el mundo

Recursos para profesores



## Make it: code it

Proyectos rápidos para todas las edades, indexados por tema, nivel, lenguaje de programación y características del micro:bit

### Lenguaje de programación

- MakeCode (93)
- Python (83)
- Scratch (6)

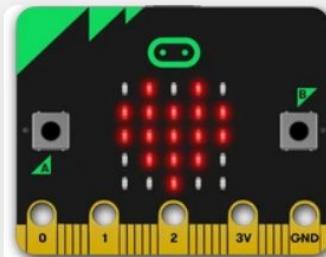
Todos los niveles

■ ■ ■ Principiante

■ ■ ■ Intermedio

■ ■ ■ Avanzado

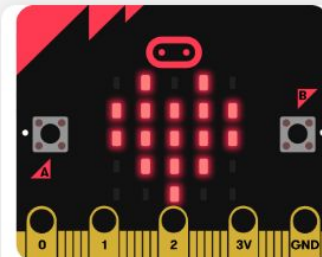
101 resultados



### Corazón

Llena tu micro:bit de amor mostrando un corazón

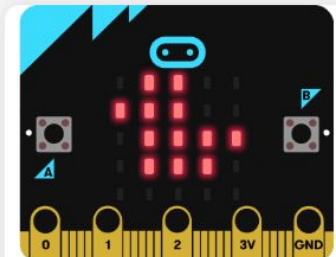
■ ■ ■ Principiante



### Corazón palpitante

Haz latir el corazón de tu micro:bit usando bucles

■ ■ ■ Principiante

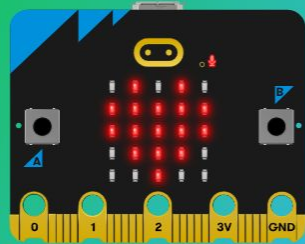


### Animales animados

Anima tus propios animales en la pantalla del micro:bit

■ ■ ■ Principiante

## BBC micro:bit



Crea | Aprende | Programa

La computadora de bolsillo que transforma el mundo

Recursos para profesores



## Enlaces rápidos

Nuevo en la programación o con micro:bit

{ } MakeCode editor

## Mis proyectos [Ver todos](#)

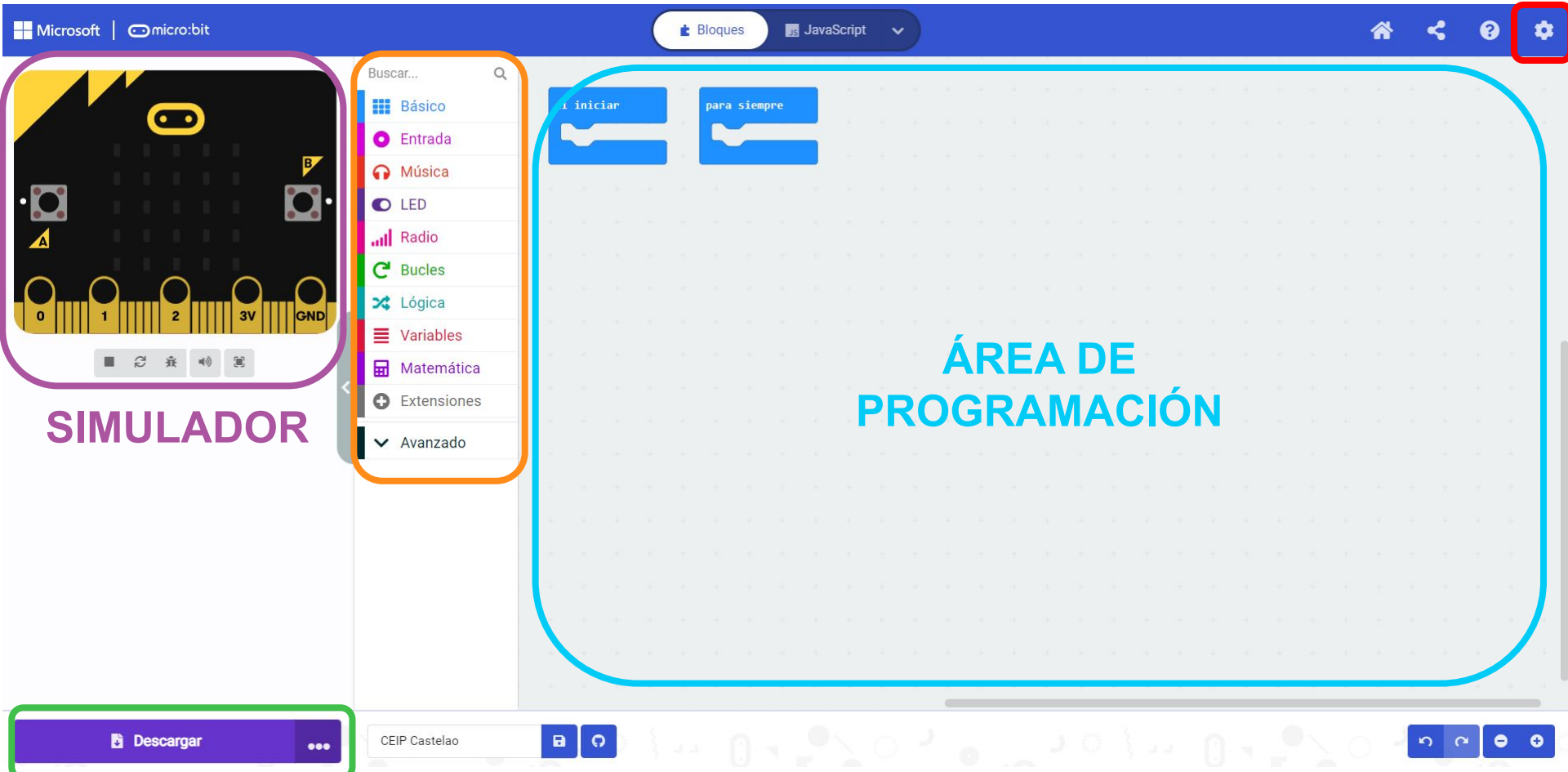


Nuevo proyecto



# CATEGORÍAS DE BLOQUES

# CAMBIAR IDIOMA

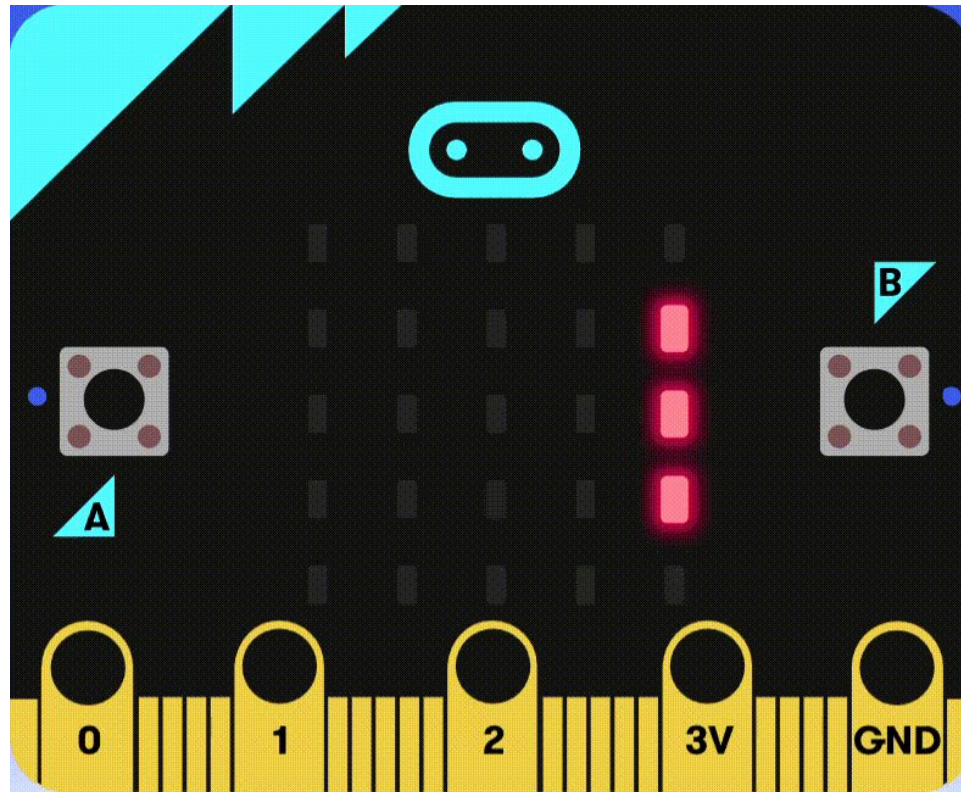


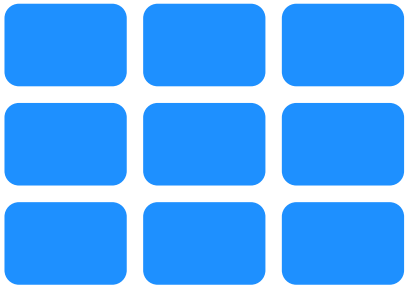
SIMULADOR

ÁREA DE PROGRAMACIÓN

CONEXIÓN CON MICRO:BIT

# OBJECTIVO





# BÁSICO

mostrar número 0

mostrar LEDs

mostrar ícono 

mostrar cadena "Hello!"

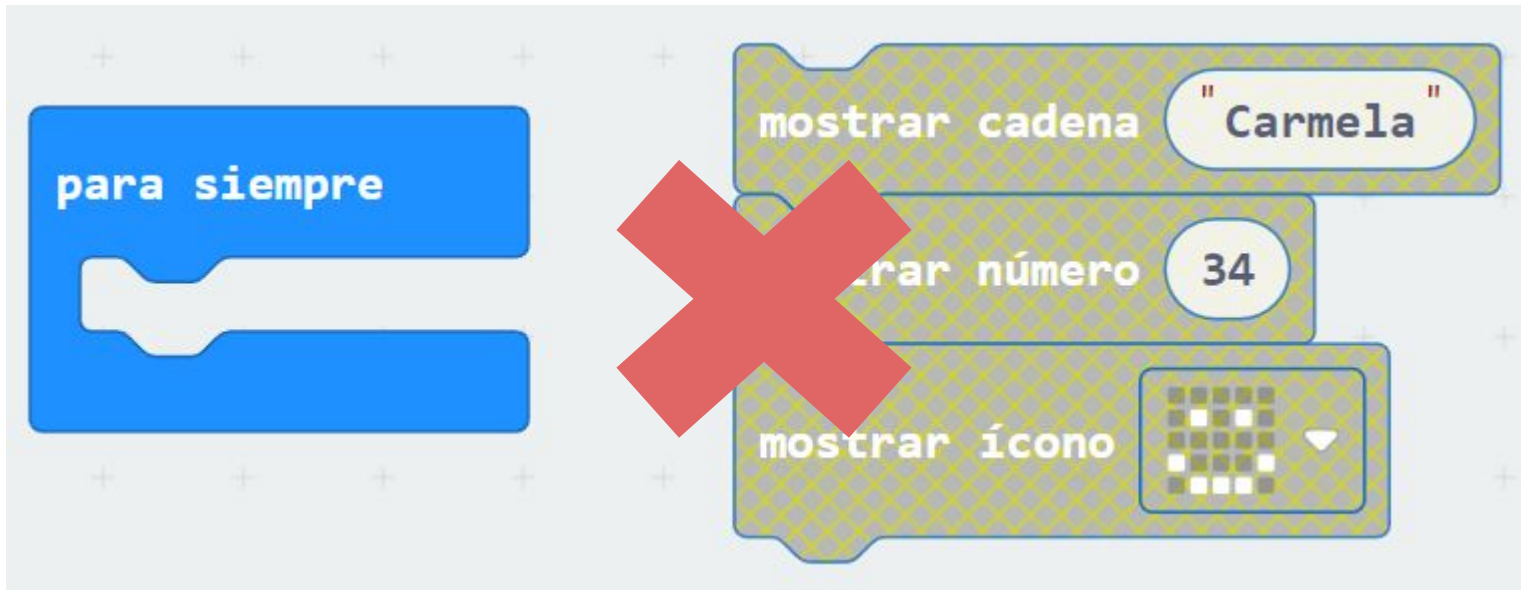
A Scratch script on a dark grey background. It consists of four blue blocks stacked vertically. The first block is 'mostrar número' with a white circle containing the number '0'. The second block is 'mostrar LEDs' and contains a 3x3 grid of smaller blue squares. The third block is 'mostrar ícono' with a dropdown menu showing a 3x3 grid of white squares on a blue background. The fourth block is 'mostrar cadena' with a white oval containing the text 'Hello!'.

para siempre

al iniciar

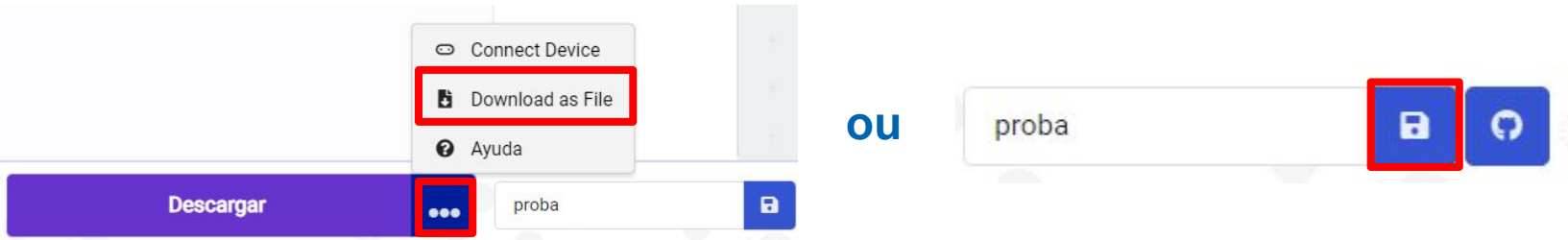
pausa (ms) 100

A Scratch script on a dark grey background. It consists of three blue blocks stacked vertically. The first block is 'para siempre' with a black loop icon. The second block is 'al iniciar' with a black loop icon. The third block is 'pausa (ms)' with a white oval containing the number '100' and a small downward arrow.



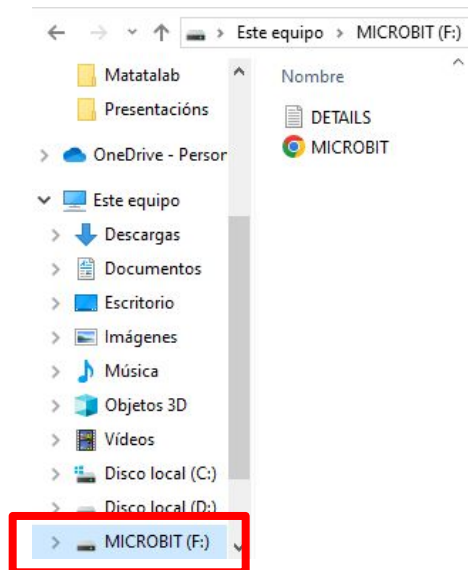
# Pasar o programa á micro:bit

## Paso 1. Descargar



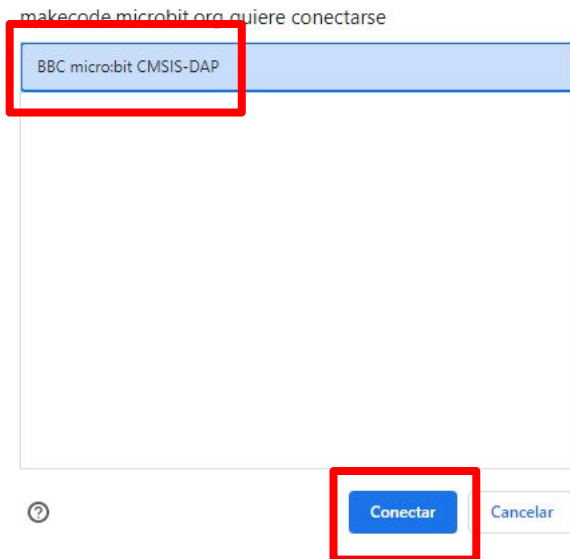
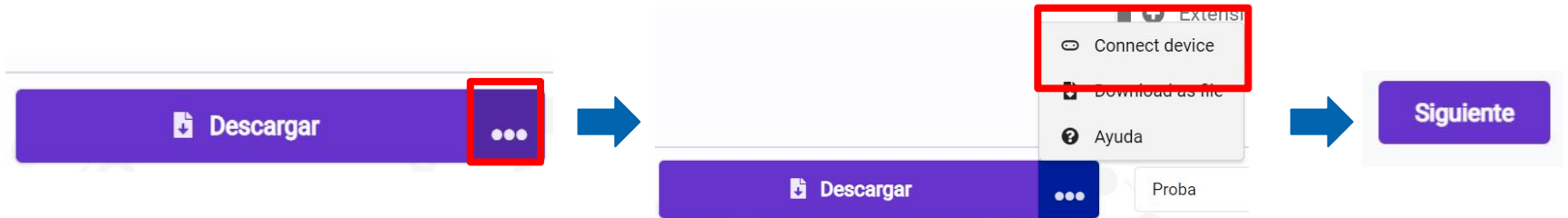
## Paso 2. Localizar o arquivo descargado (xeralmente en descargas) e pegalo na carpeta micro:bit.

\*A micro:bit funciona como un Pen Drive



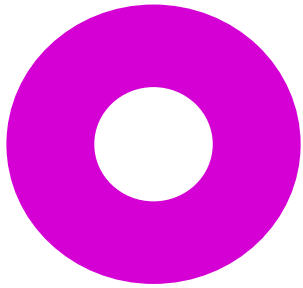
# Conectar micro:bit

(só é posible en windows/mac usando google chrome)



# OBJECTIVO





# ENTRADA

al detectar el sonido

al  el logotipo

nivel de luz

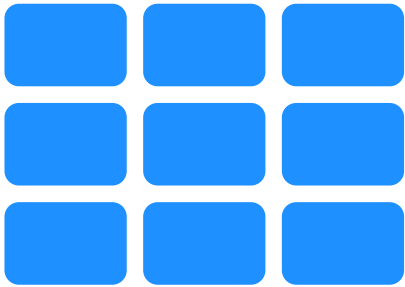
dirección de la brújula (°)

temperatura (°C)

al presionarse el botón

si





# BÁSICO

mostrar número 0

mostrar LEDs

mostrar ícono 

mostrar cadena "Hello!"

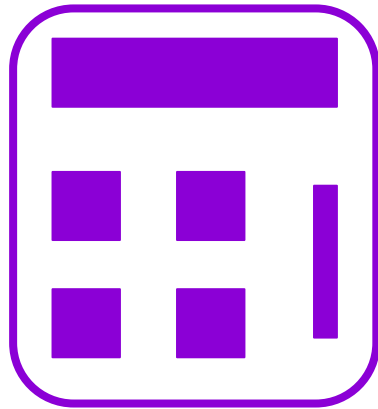
Detailed description: This is a Scratch script on a dark grey background. It consists of four blue blocks. The first block is 'mostrar número' with a white circle containing the number '0'. The second block is 'mostrar LEDs' and contains a 3x3 grid of smaller blue squares. The third block is 'mostrar ícono' with a dropdown menu showing a 3x3 grid of white squares on a blue background. The fourth block is 'mostrar cadena' with a white circle containing the text 'Hello!'.

para siempre

al iniciar

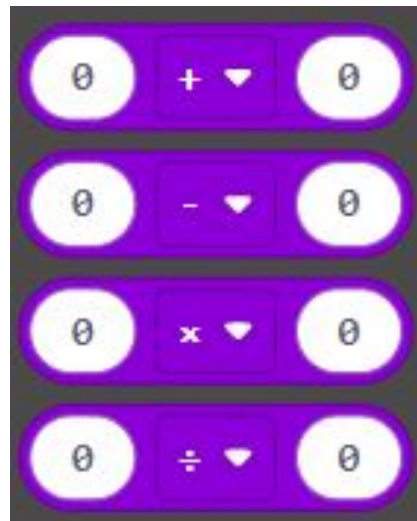
pausa (ms) 100

Detailed description: This is a Scratch script on a dark grey background. It consists of three blue blocks. The first block is 'para siempre' (forever loop) with a black loop arrow. The second block is 'al iniciar' (when green flag clicked) with a black loop arrow. The third block is 'pausa (ms)' with a white circle containing the number '100' and a small downward arrow.



# MATEMÁTICAS

escoger al azar de  a



si agitado ▼

mostrar número

escoger al azar de

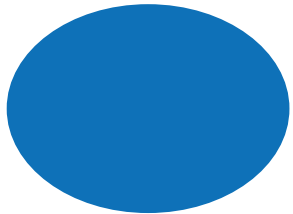
1

a

6



# DATOS



Valores  
numéricos/texto

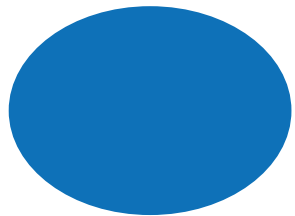
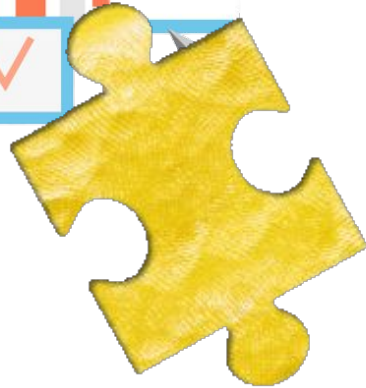
nivel de luz

temperatura (°C)

escoger al azar de 0 a 10



# DATOS



Valores  
numéricos/text

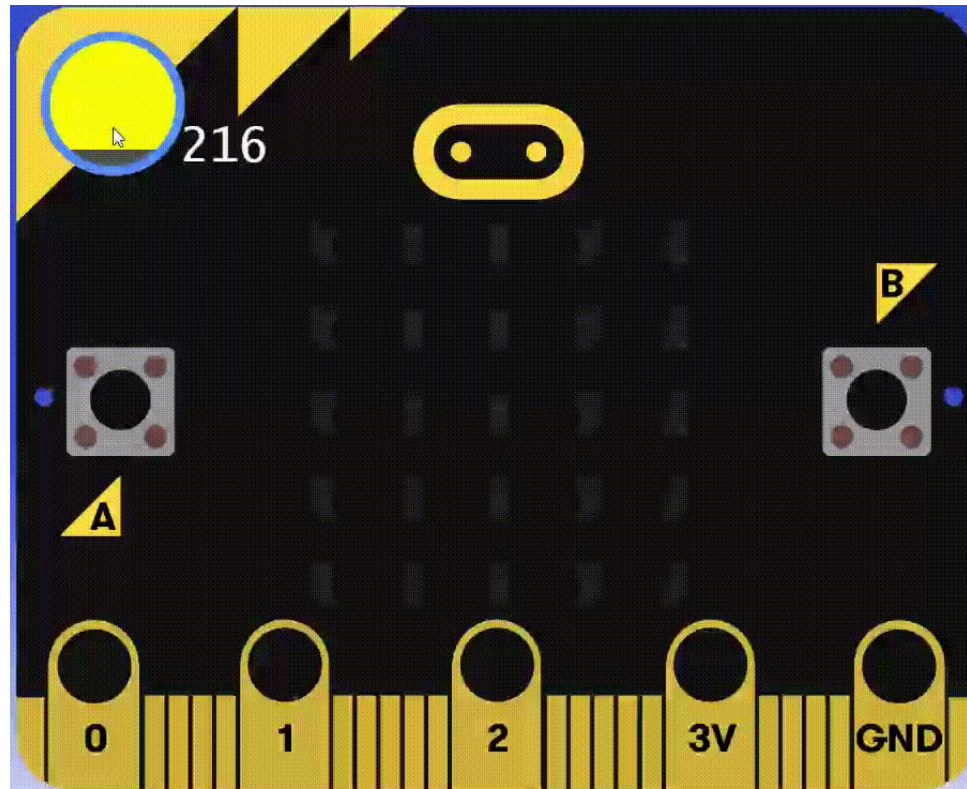


nivel de luz

temperatura (°C)

generar al azar de 0 a 10

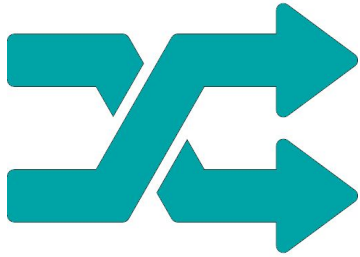
# OBJECTIVO



para siempre

mostrar número

nivel de luz

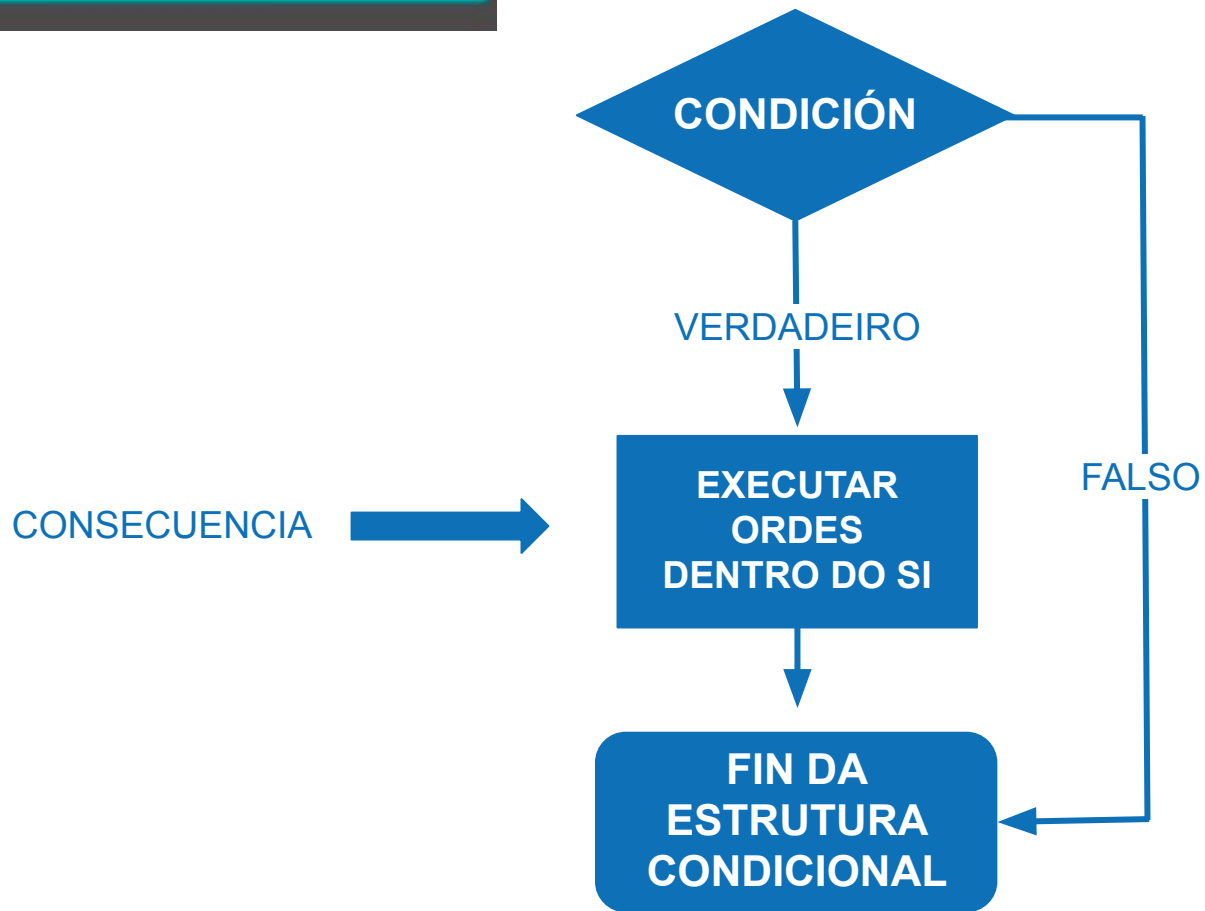
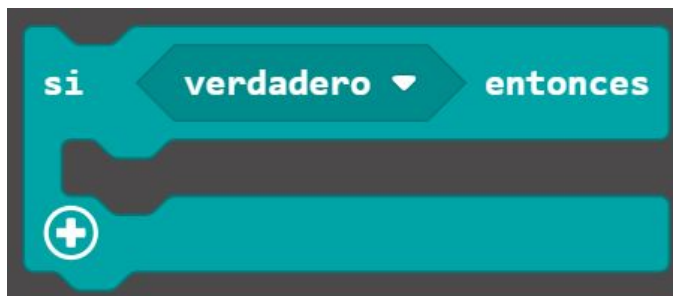


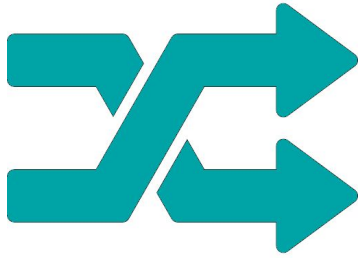
# LÓXICA

## Condicionais



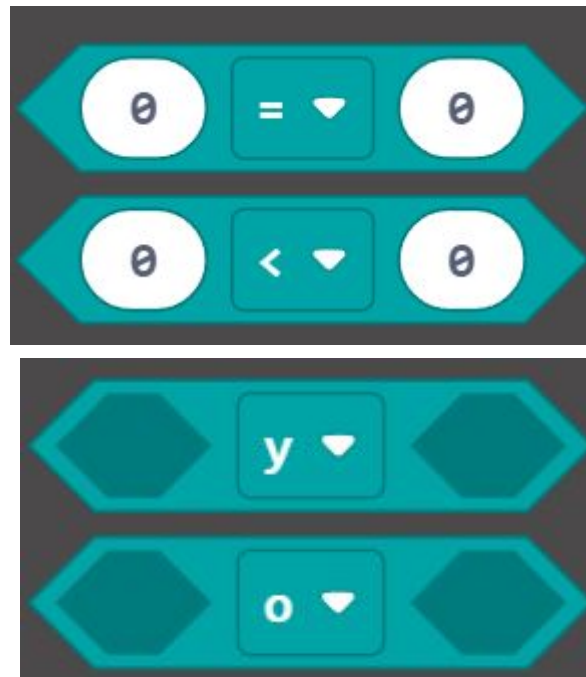


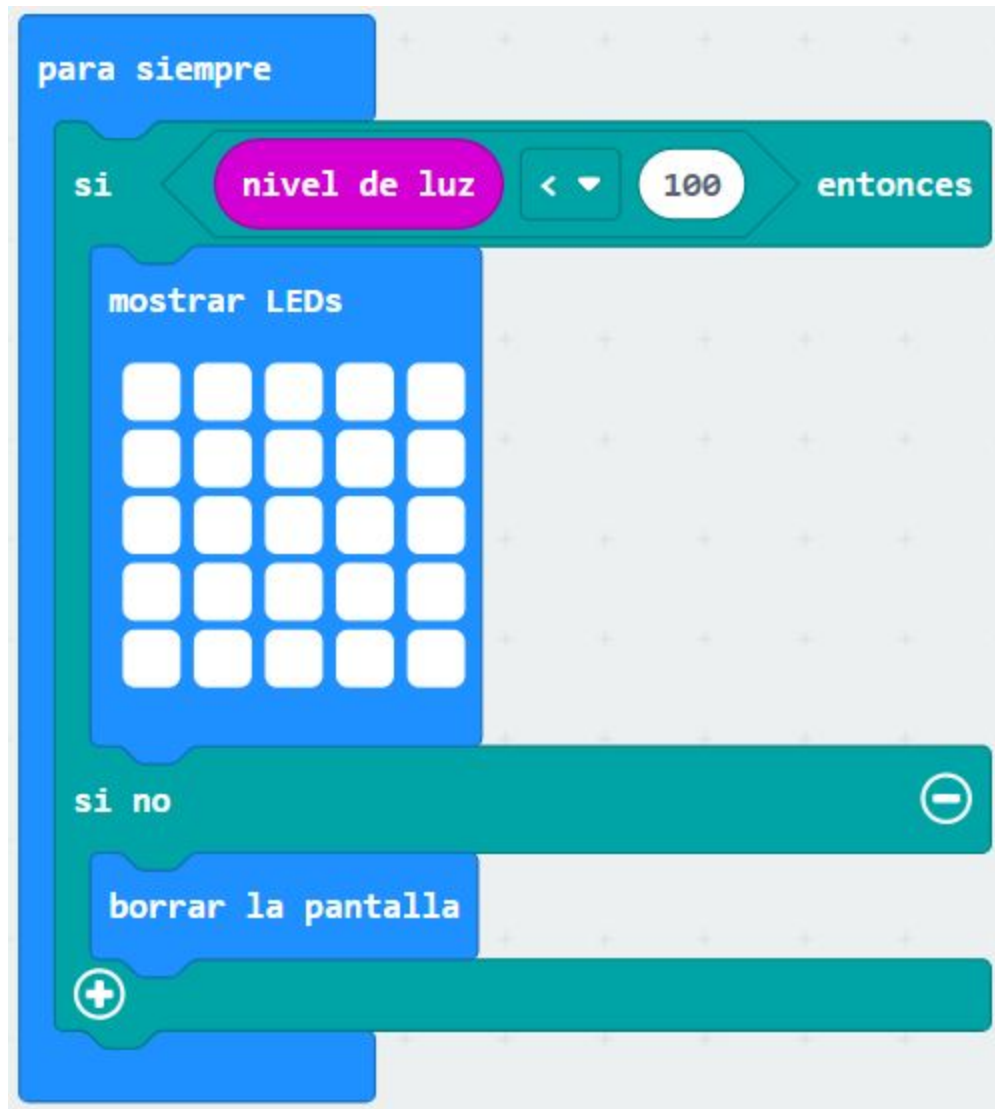




# LÓXICA

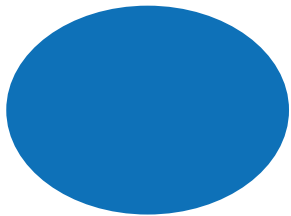
## Comparativos







# DATOS

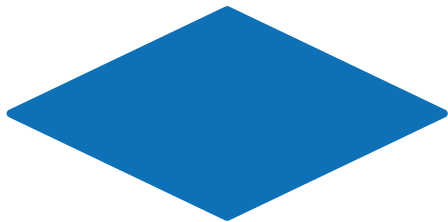


Valores  
numéricos/texto

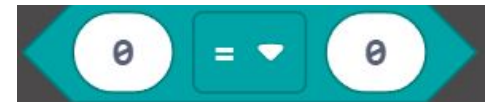
nivel de luz

temperatura (°C)

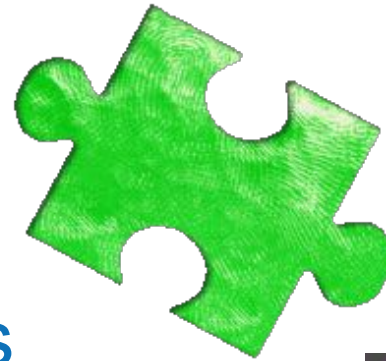
escoger al azar de 0 a 10



Verdadero/Falso



# DATOS

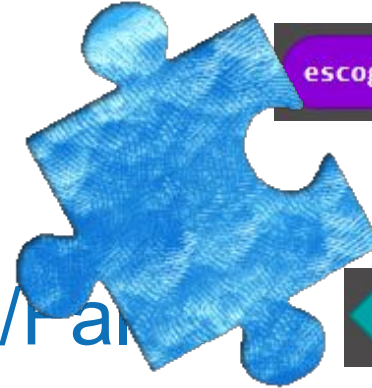


nivel de luz

temperatura (°C)

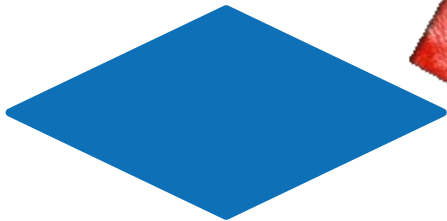
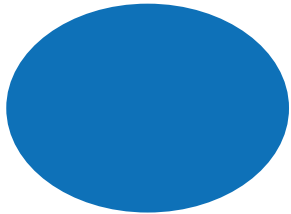
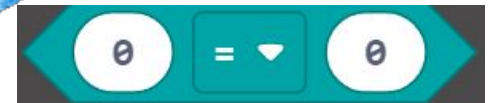
escoger al azar de 0 a 10

valores  
numéricos/texto

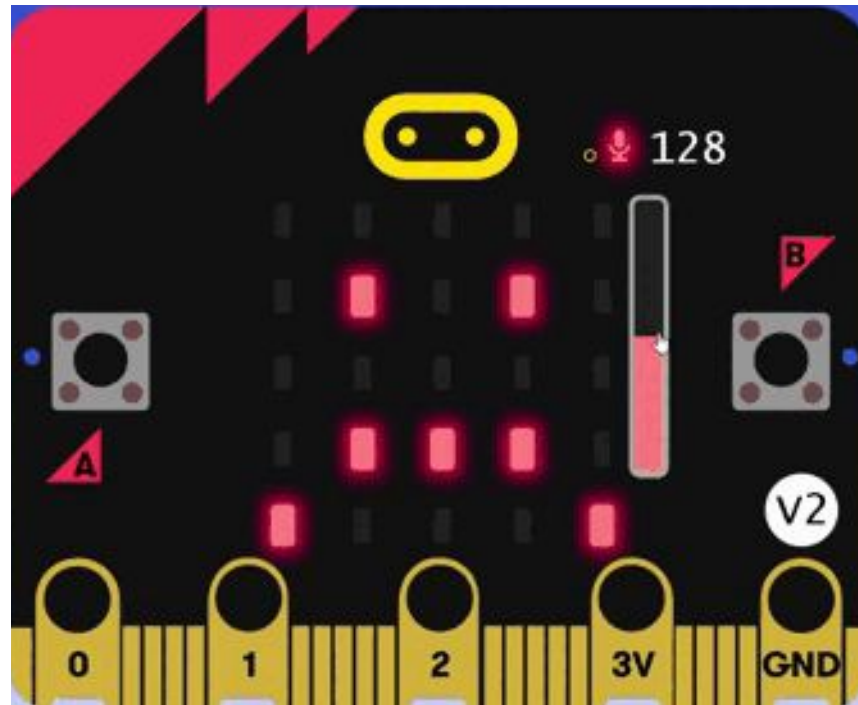


escoger al azar de 0 a 10

Verdadero/Falso



# OBJECTIVO

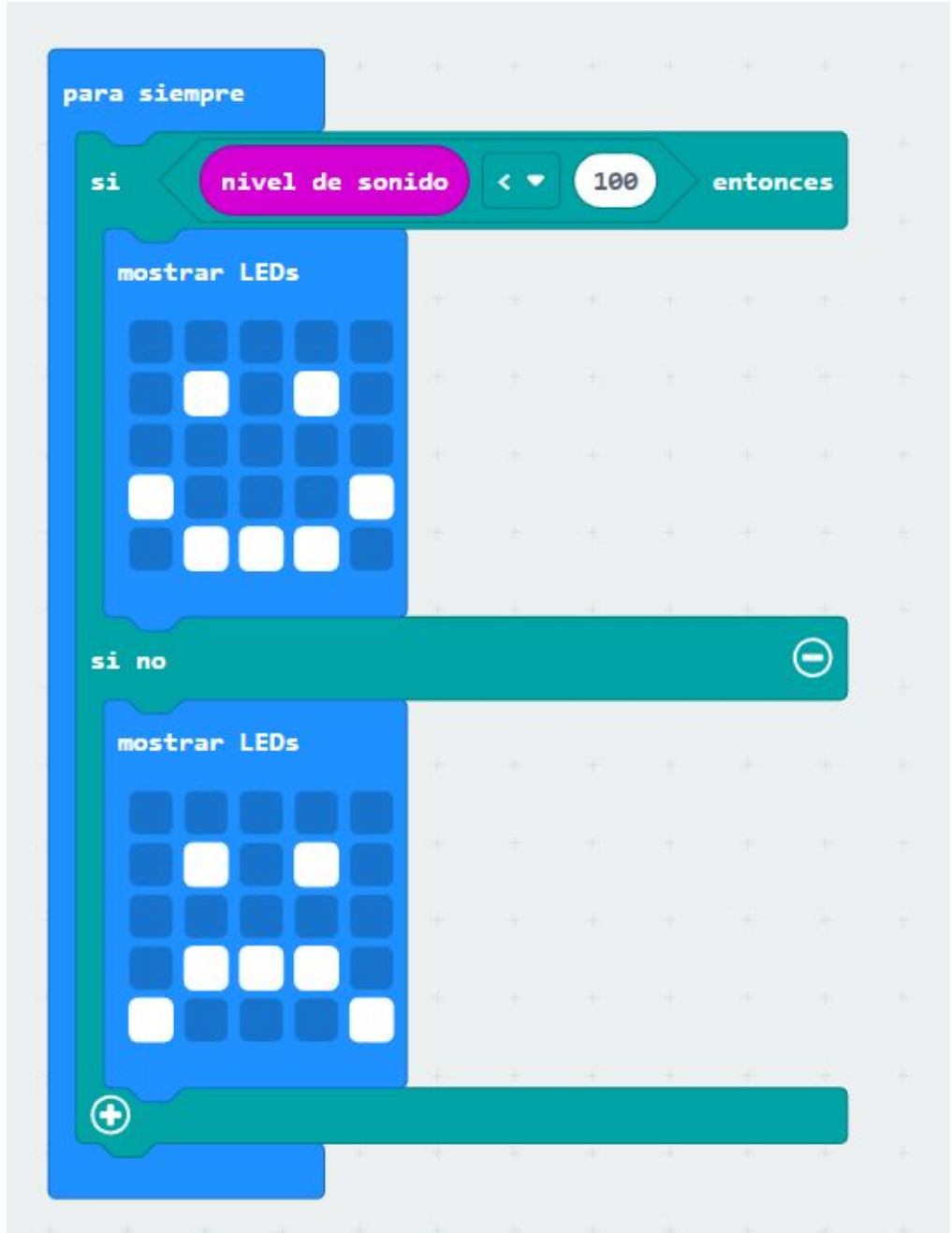


A Scratch code block consisting of a blue 'para siempre' (forever) loop block. Inside the loop is a blue 'mostrar número' (show number) block with the value 'nivel de sonido' (sound level) in a pink rounded rectangle. The background is a light gray grid with small plus signs.

para siempre

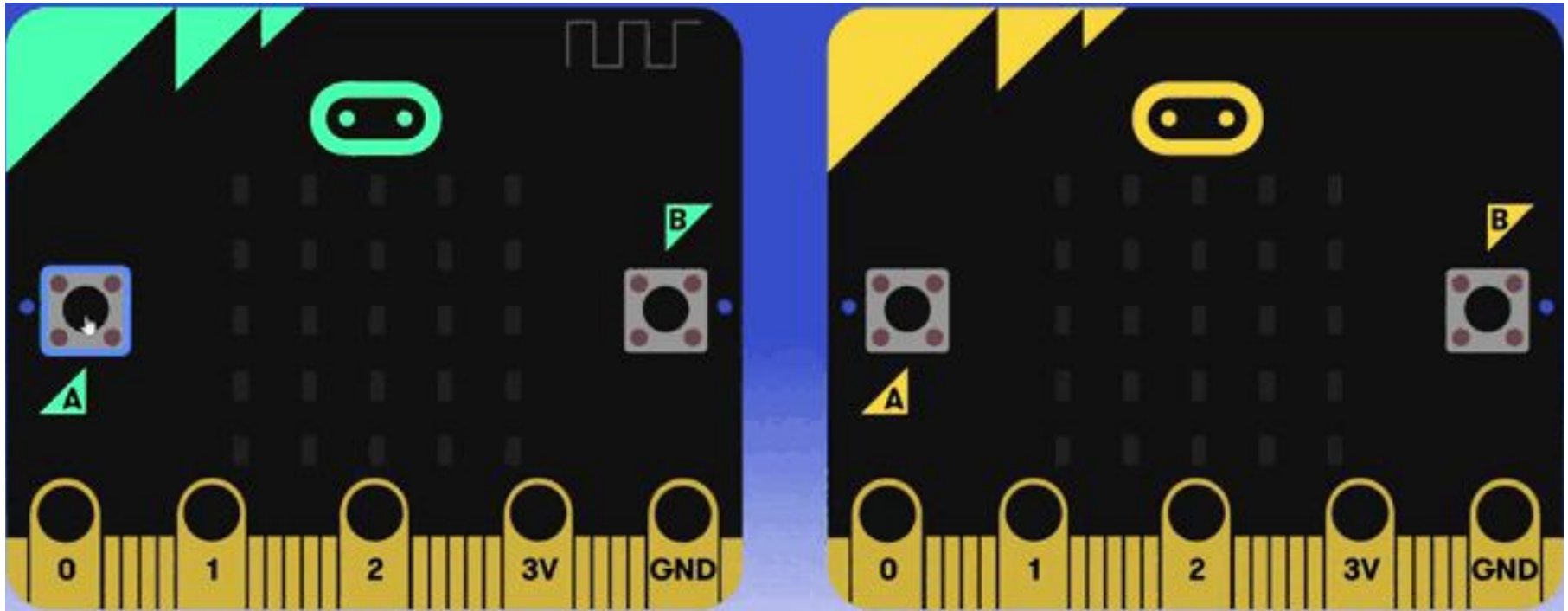
mostrar número

nivel de sonido





# OBJECTIVO





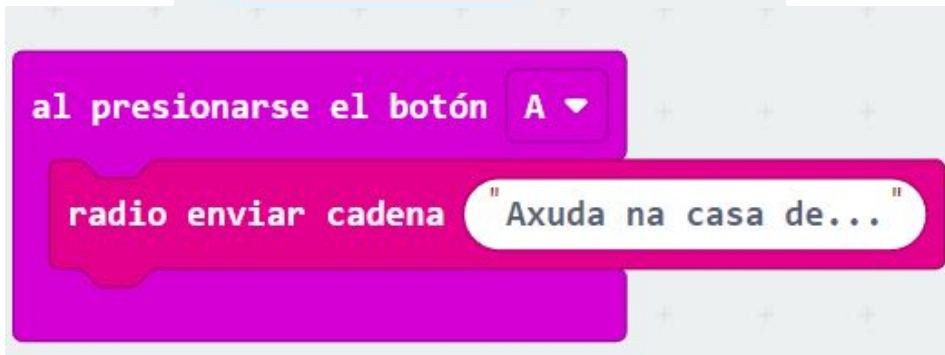
# RADIO

radio establecer grupo 1

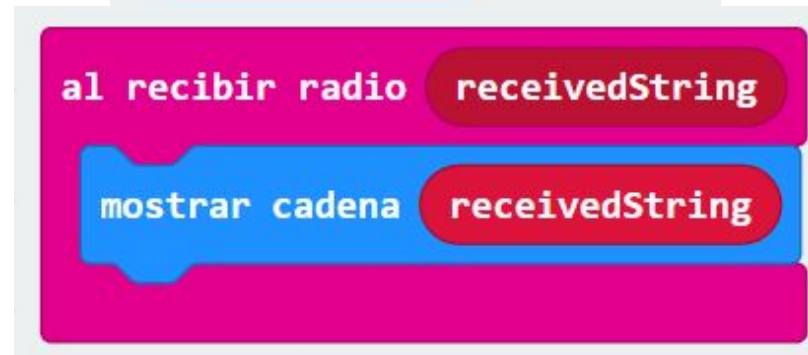
radio enviar número 0

al recibir radio receivedNumber

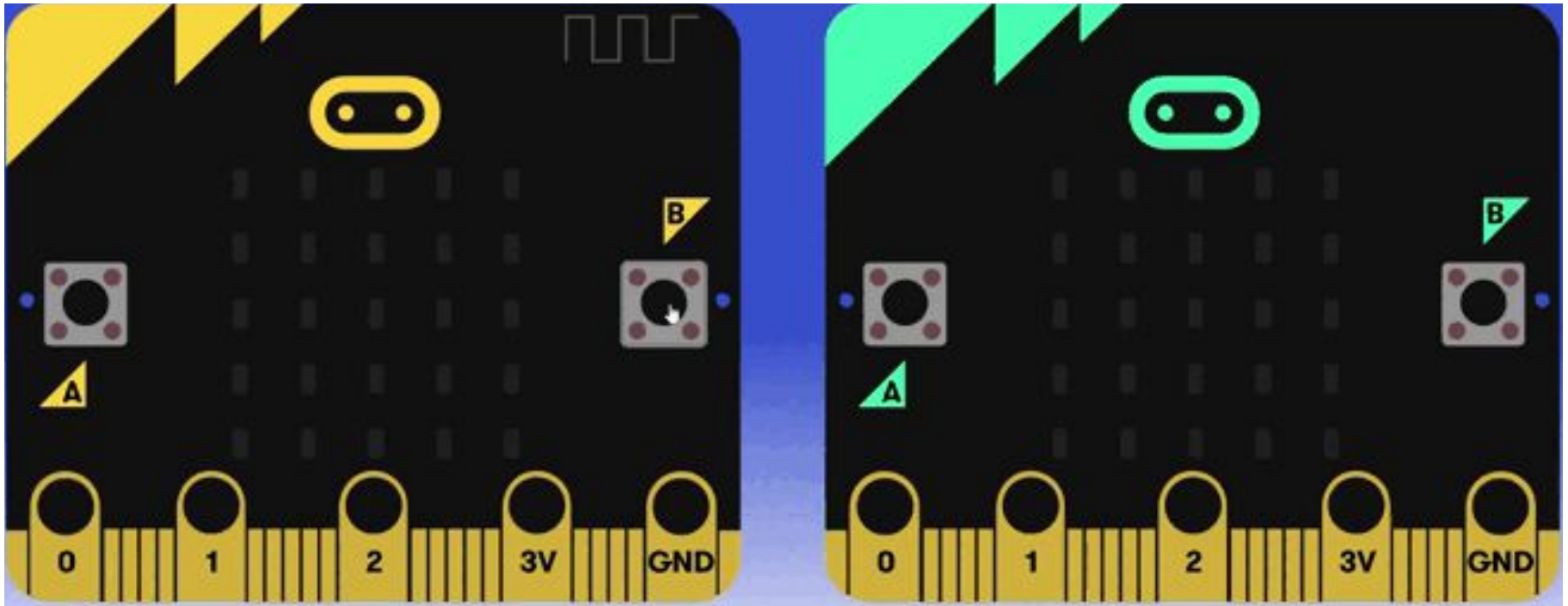
# MICRO:BIT EMISORA



# MICRO:BIT RECEPTORA



# OBJECTIVO



# MICRO:BIT EMISORA

```
para siempre
  radio establecer grupo 1

al presionarse el botón A
  radio enviar número 0

al presionarse el botón B
  radio enviar número 1
```

The code for the transmitter consists of three main blocks. First, a 'para siempre' (forever) loop containing a 'radio establecer grupo' (radio set group) block with the value 1. This is followed by two event-driven blocks: 'al presionarse el botón A' (when button A is pressed) which triggers 'radio enviar número' (radio send number) with the value 0, and 'al presionarse el botón B' (when button B is pressed) which triggers 'radio enviar número' with the value 1.

# MICRO:BIT RECEPTORA

```
para siempre
  al recibir radio receivedNumber
    si receivedNumber = 0 entonces
      mostrar LEDs
    +
    si receivedNumber = 1 entonces
      mostrar LEDs
    +
  
```

The code for the receiver is contained within a 'para siempre' (forever) loop. It begins with an 'al recibir radio receivedNumber' (when radio received number) block. This is followed by a series of conditional blocks: a 'si receivedNumber = 0 entonces' (if received number is 0 then) block containing a 'mostrar LEDs' (show LEDs) block with a white grid; a '+' connector; a 'si receivedNumber = 1 entonces' (if received number is 1 then) block containing a 'mostrar LEDs' block with a blue grid; and another '+' connector. The code is partially cut off at the bottom.

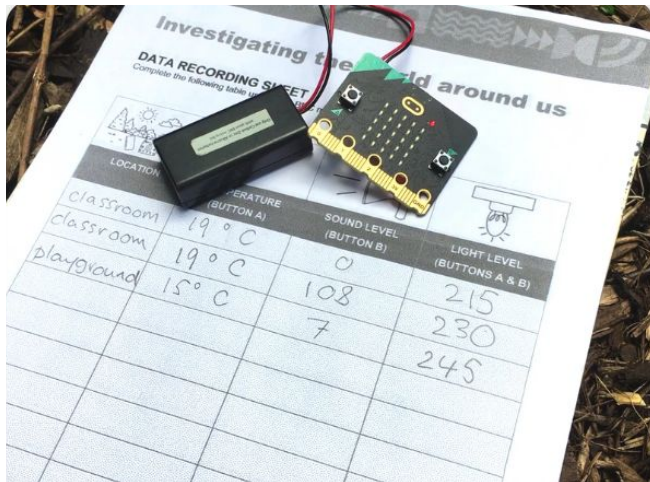
# PROXECTOS CON MICRO:BIT



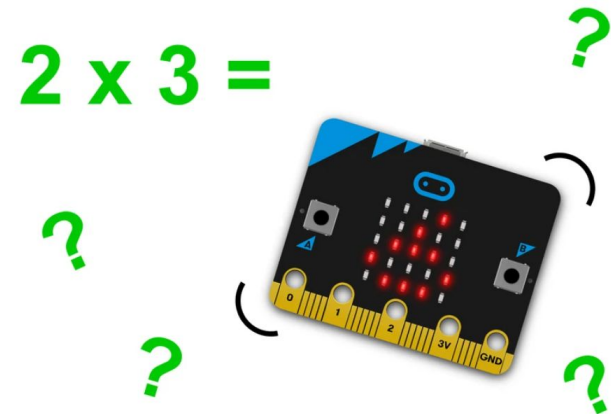




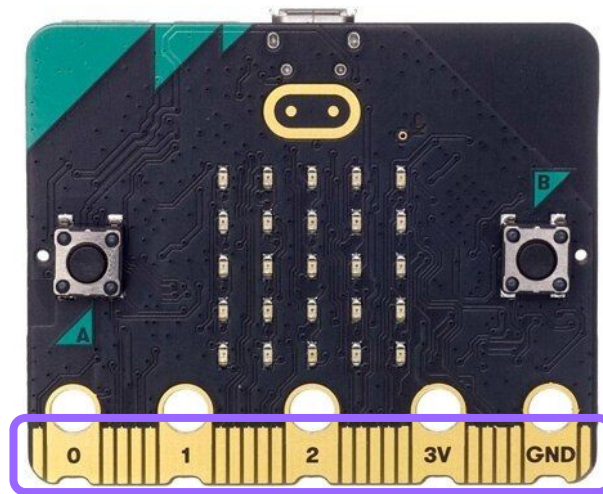
Contador de pasos



Exploración ambiental

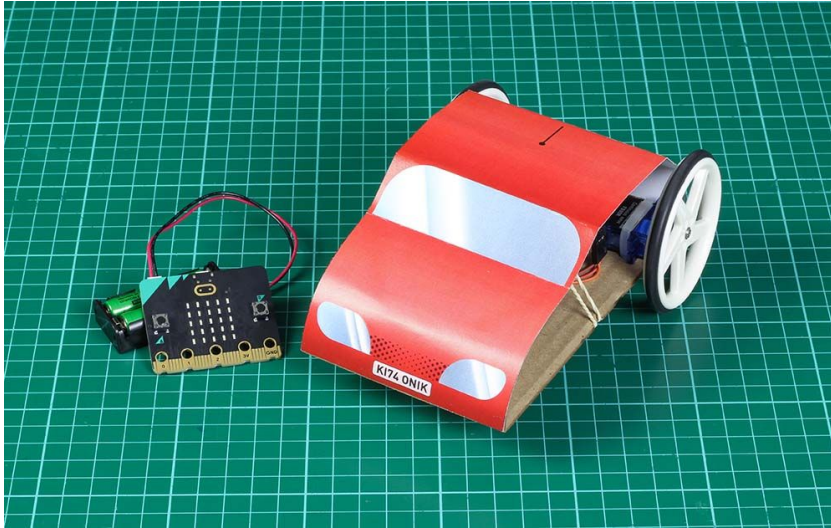


Multiplicacións

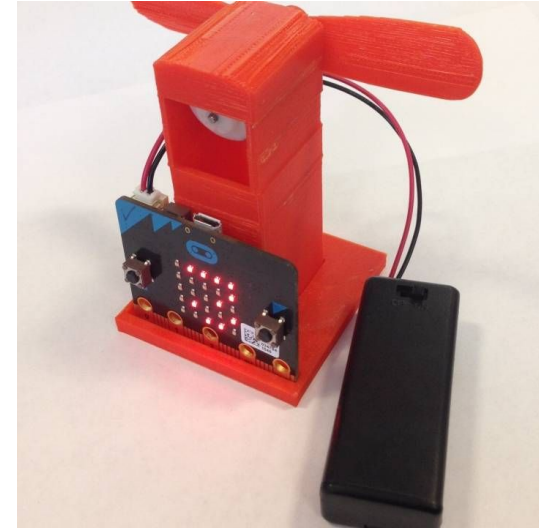


Pins para conectar  
componentes  
externos





**Vehículo con control remoto**



**Ventilador intelixente**

# Cámara de IA



# Kit de construcción

**ELECTREKAS**  
MAKE CODING ACCESSIBLE

Beginner Medium Advanced

```
on start
  when flag clicked
  set motor 0 to speed to 100
  set motor 1 to speed to 100

repeat
  if distance sensor is at distance on 0
    set 0 to motor 0 to speed to 100
    play (1) 1000
  set 0 to motor 0 to speed to 100
  play (1) 1000
else
  set 0 to motor 0 to speed to 100
```

PRACTICE  
CODING

## Nezha

Inventor's kit for micro:bit

Use it to start a magical journey.



**Indicador de rego**



**Vehículo intelixente**



<https://wiki.electfreaks.com/en/>

# CRAZAS



[@makerstorecarballo](https://www.instagram.com/makerstorecarballo)