

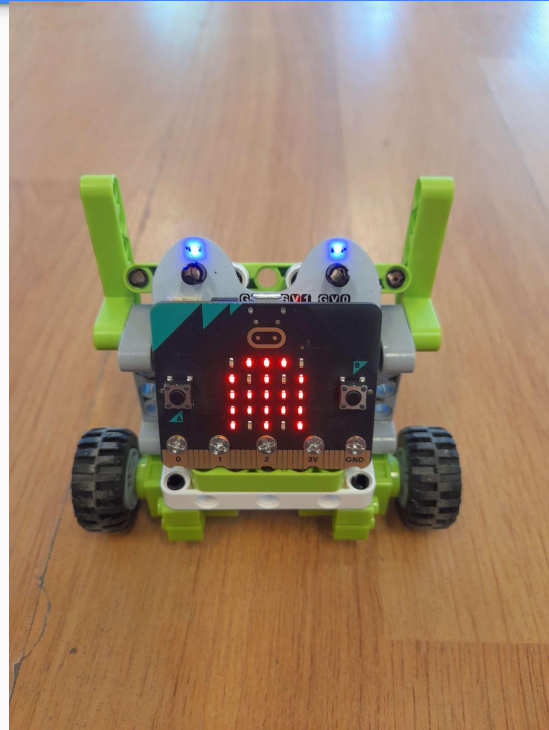
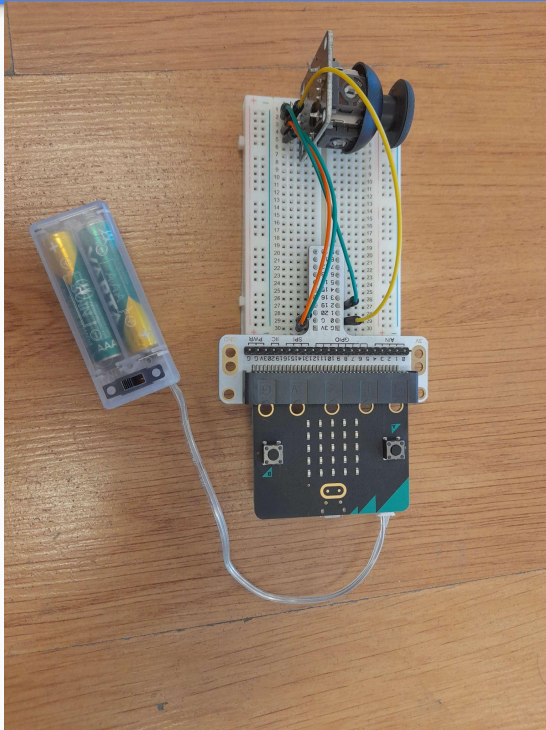
# Remote controlled robot

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We created a robot controlled by a joystick and buttons, the joystick turns the robot and the buttons control the movement, the communication is remote by radio signals



# The hardware



# The software

```
on start
  show icon
  radio set group 11
  set left wheel at pin P8 - right wheel at pin P5
  set deviceOn to 0
  set volume 255

on radio received receivedNumber
  if receivedNumber == 1000 then
    set deviceOn to 1
  else if receivedNumber == 2000 then
    brake
    set deviceOn to 0
  else if receivedNumber == 3000 then
    reverse at full speed
    set deviceOn to 1
  else if receivedNumber == 1001 then
    play tone Middle C for 1 beat until done
    pause (ms) 50
    play tone Middle C for 1 beat until done
  if deviceOn == 1 then
    set wheelData to call calculateData receivedNumber
    set left wheel speed at wheelData get value at 0 - right wheel speed at wheelData get value at 1

function calculateData controlData
  let leftWheelSpeed
  let rightWheelSpeed
  if controlData > 0 then
    set leftWheelSpeed to 100 - controlData
    set rightWheelSpeed to 100
  else
    set leftWheelSpeed to 100
    set rightWheelSpeed to 100 + controlData
  set wheelData2 to array of leftWheelSpeed - rightWheelSpeed
  return wheelData2
```

```
on start
  radio set group 11
  let potentiometerData
  let deviceOn: boolean
  set deviceOn to false

on logo pressed
  radio send number 1001

forever
  set potentiometerData to analog read pin P8
  set mappedData to round map potentiometerData from low 4 high 1023 to low -100 high 100
  radio send number mappedData

on button A pressed
  radio send number 1000

on button B pressed
  radio send number 2000

on button A+B pressed
  radio send number 3000
```

