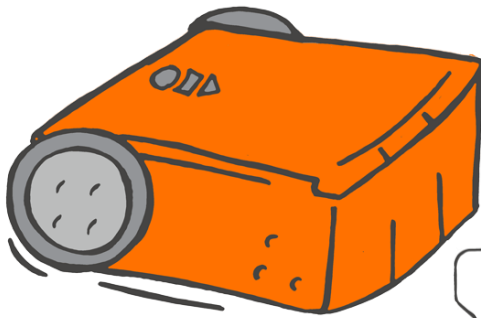
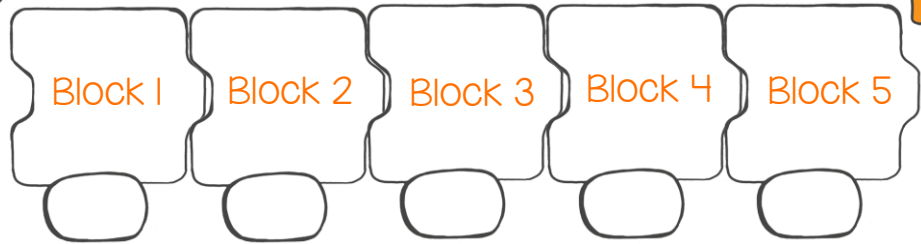


# Welcome to EdBlocks



↖ You already know Edison.

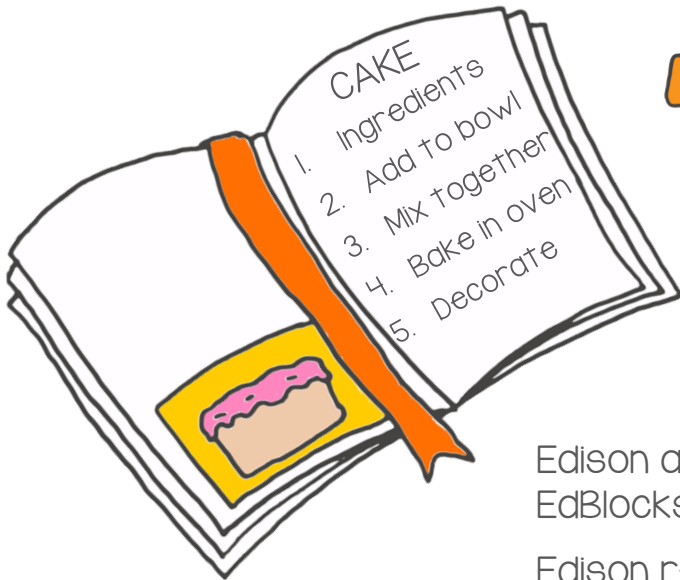
Now it is time to use EdBlocks.



## What is EdBlocks?

EdBlocks is a robot programming language we can use to program Edison.

You can program Edison to do different things using EdBlocks.



## ↖ How do EdBlocks work?

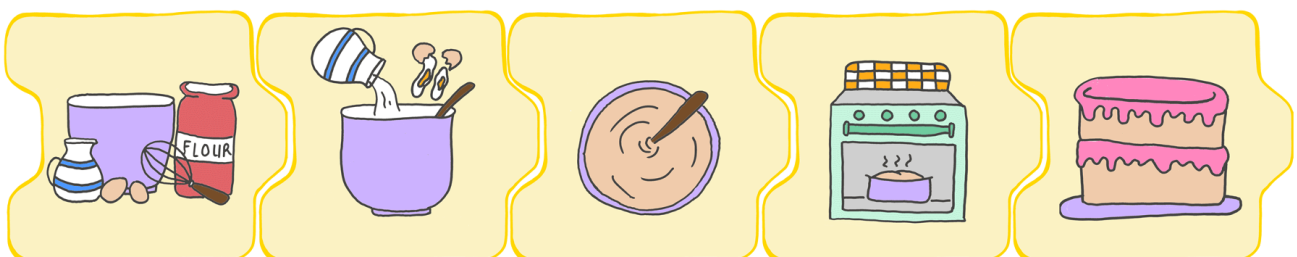
Imagine you are baking a cake. How would you know what to do?

When you read a cookbook, you follow each step one by one.

Edison also follows steps one by one, using EdBlocks.

Edison reads EdBlocks from left to right, starting at block one. Edison then moves along the EdBlocks one block at a time.

↖ So, Edison can follow the same instructions, just in a different way.



## Find the answer

Let's practice using EdBlocks.

We need to get Edison to do several things, one by one. Get Edison to do the following things in this order:

1. Drive forward for 2 seconds
2. Turn left for 0.4 seconds
3. Turn on the right LED light
4. Drive backwards for 3 seconds
5. Turn right for 0.9 seconds

Look at the blocks below. These are the blocks we need to write the program, but they are in the wrong order.

This is the start block.

This is the amount of seconds Edison is turning for.

## Your turn

Organise the blocks into the correct order.

Draw the blocks in the right order here.

Write in the correct number of seconds Edison is driving or turning in this spot.

# Let's download a program

Now that you know about Edison and EdBlocks, we can use EdBlocks to tell Edison what to do. To do this, we need to download a program onto Edison.

On your computer, go online to

[www.edblocksapp.com](http://www.edblocksapp.com) 

This time, we are going to load a program that has already been made. Once you know how to download a program, you can start to make your own programs.



### Step 1: Check the computer

Make sure the volume is turned up all the way on the computer.

### Step 2: Open the EdBlocks app

Go to [www.edblocksapp.com](http://www.edblocksapp.com)

### Step 3: Select 'Menu'

After opening the app, look in the top left corner. Click on the Menu button.



### Step 4: Select 'Load Demos'

Scroll down and find 'Load Demos' in the list. Click on Load Demos.



### Step 5: Select 'Follow torch/flashlight'

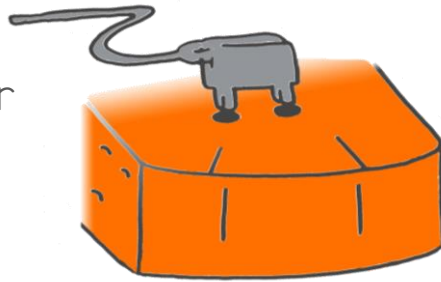
Find and click on the program called 'Follow torch/flashlight'.

A program will open in the main screen. It looks like this:



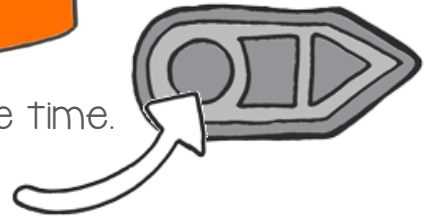
### Step 6: Plug Edison in

Connect Edison to the computer with the EdComm cable.



### Step 7: Get Edison ready

Push the record button (round button) on Edison one time.

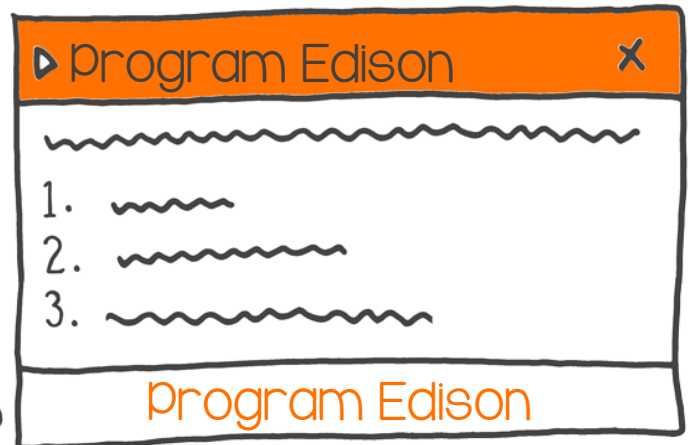


### Step 8: Program Edison

Look in the top right corner of the app. See where it says 'Program Edison'? Click on Program Edison.



A new pop-up message box will open.



In the bottom of the box, click on Program Edison.

You will hear the program being downloaded to Edison. Once it is done downloading, Edison will beep. Don't unplug Edison until you hear the beep!

To run the program, unplug Edison, then push the play button (triangle button).

### Activity

Let's take Edison for a walk in the dark.

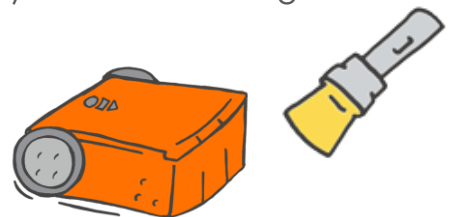
Get a torch ready and put Edison on the floor.

Press the play button (triangle button). Turn the lights off in the room. Now, shine the torch at Edison.

Edison will drive around following the light of the torch. Take Edison for a walk in the room.

Can you make Edison do tricks?

Try to make Edison turn around or do a spin!



# Let's drive

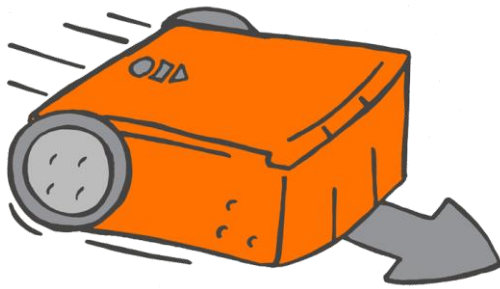
To use EdBlocks to program Edison, you need to use the EdBlocks app. Go to the app online at [www.edblocksapp.com](http://www.edblocksapp.com)

## What to do with EdBlocks

We can program Edison to drive forward for a set amount of time using EdBlocks.

Using the EdBlocks app, find the block to make Edison drive forward for a set amount of time.

You can change the amount of time by clicking on the number box and typing in the time you want.



## What to do with Edison

Let's get Edison to drive forward on the track on the next page.

How long will it take Edison to drive the track?

Write a program for Edison using EdBlocks. Download the program to Edison, then put Edison behind the start line.

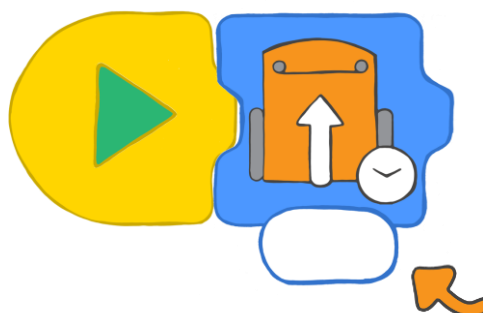
Can you make Edison drive from the start line and stop driving after crossing the finish line?

Try changing the amount of time in EdBlocks to get Edison to drive the track.

## Find the answer

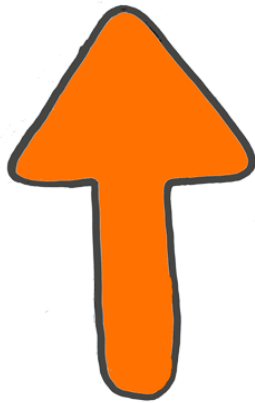
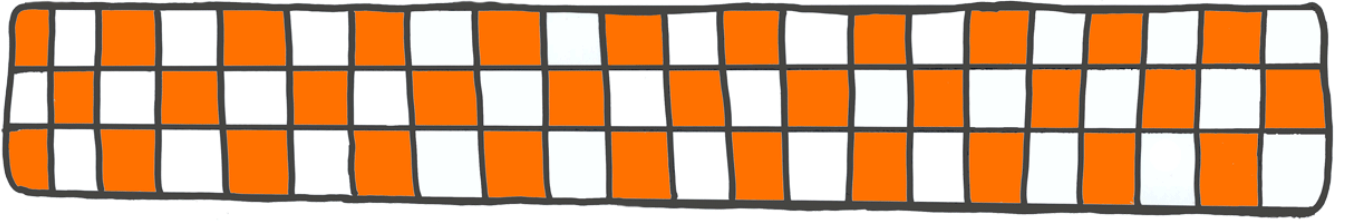
How many seconds did it take Edison to travel from the start to the finish?

Write your answer in the time box of the block below.



Write your result here.

FINISH LINE



START LINE