



# A Quick Start to Code

Anyone can learn to code on iPad or Mac with these 10 activities designed for beginners ages 10 and up.

1

Meet Byte

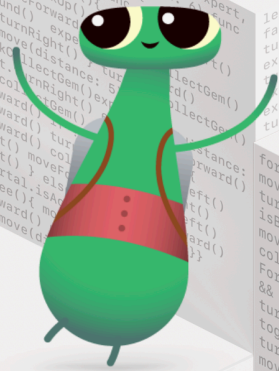


4

Go loopy

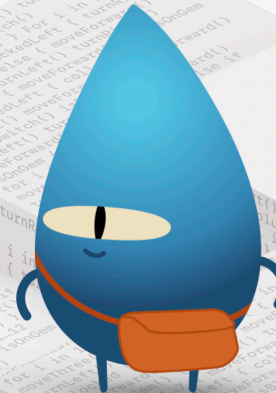
5

Code your camera



8

Control the portals



9

Play your own game

2

Find patterns

6

Track the gems

3

Get groovy

7

Draw with spirals

10

Create with shapes

# 1 Meet Byte

Learn about using commands in a sequence to solve puzzles with Byte.

## Learn to Code 1

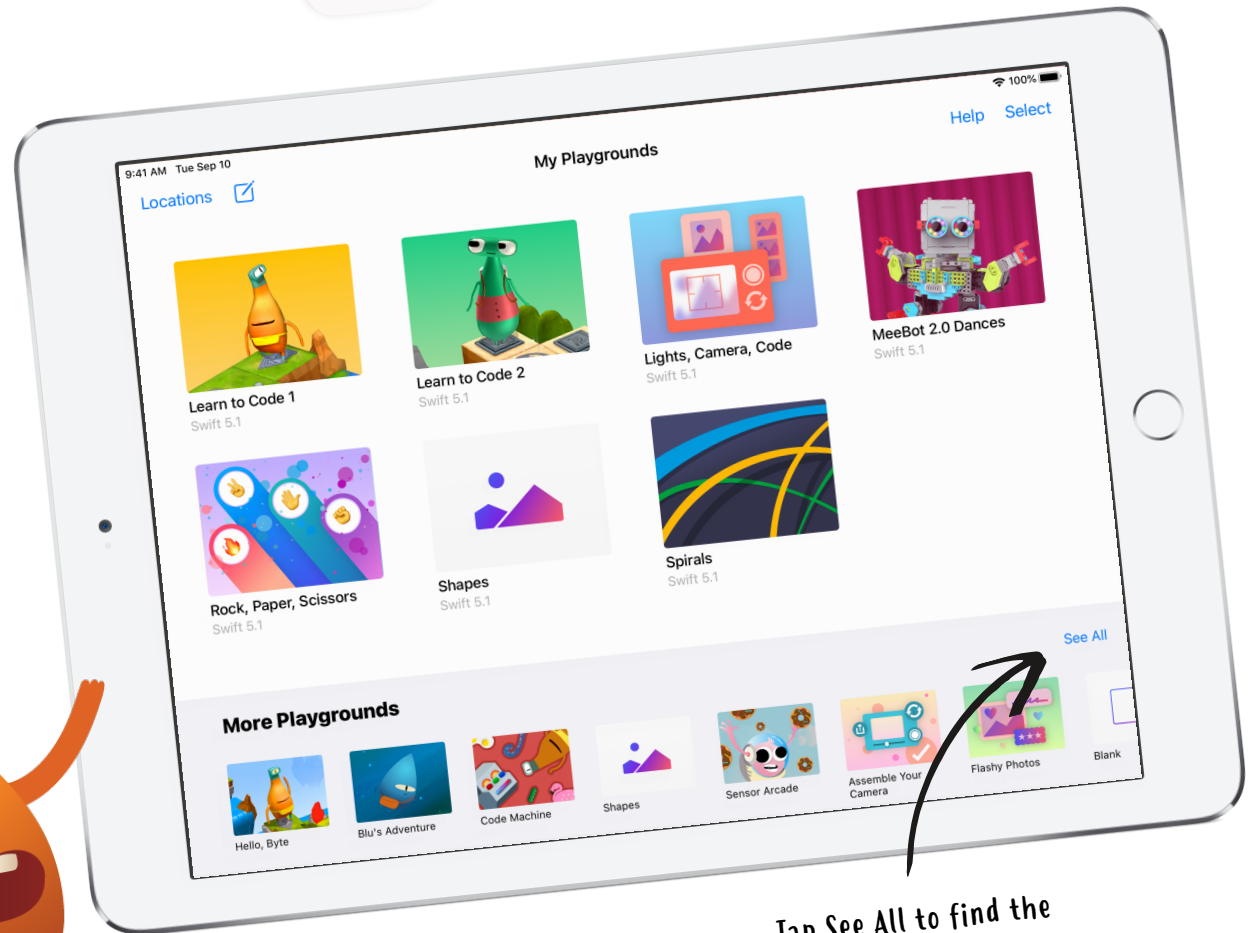


Open the Learn to Code 1 playground. Watch the introduction to Commands, then try these puzzles:

- Issuing Commands
- Adding a New Command
- Toggling a Switch



To get started, download and install Swift Playgrounds on **iPad** or **Mac**.

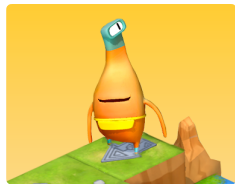


Tap See All to find the playgrounds you need, then tap GET to download.

## 2 Find patterns

Learn how to create new behaviours for Byte and solve puzzles using functions.

### Learn to Code 1



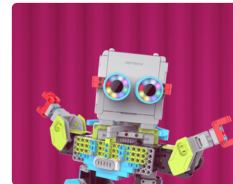
Open the Learn to Code 1 playground. Watch the introduction to Functions, then try these puzzles:

- Composing a New Behaviour
- Creating a New Function
- Nesting Patterns

## 3 Get groovy

Use Swift code to create a dance routine for your virtual MeeBot.

### MeeBot 2.0 Dances



Tap the UBTech Jimu playgrounds, then get the MeeBot 2.0 Dances playground. Watch the introduction, then try these puzzles:

- Basic Moves
- Dance Routine
- Make Your Own Moves

## 4 Go loopy

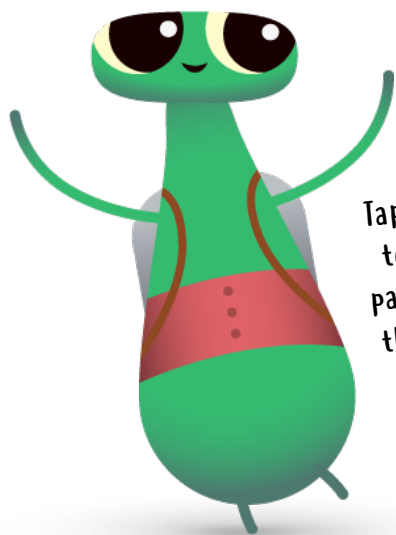
Look for patterns and use loops to help Byte collect all the gems.

### Learn to Code 1

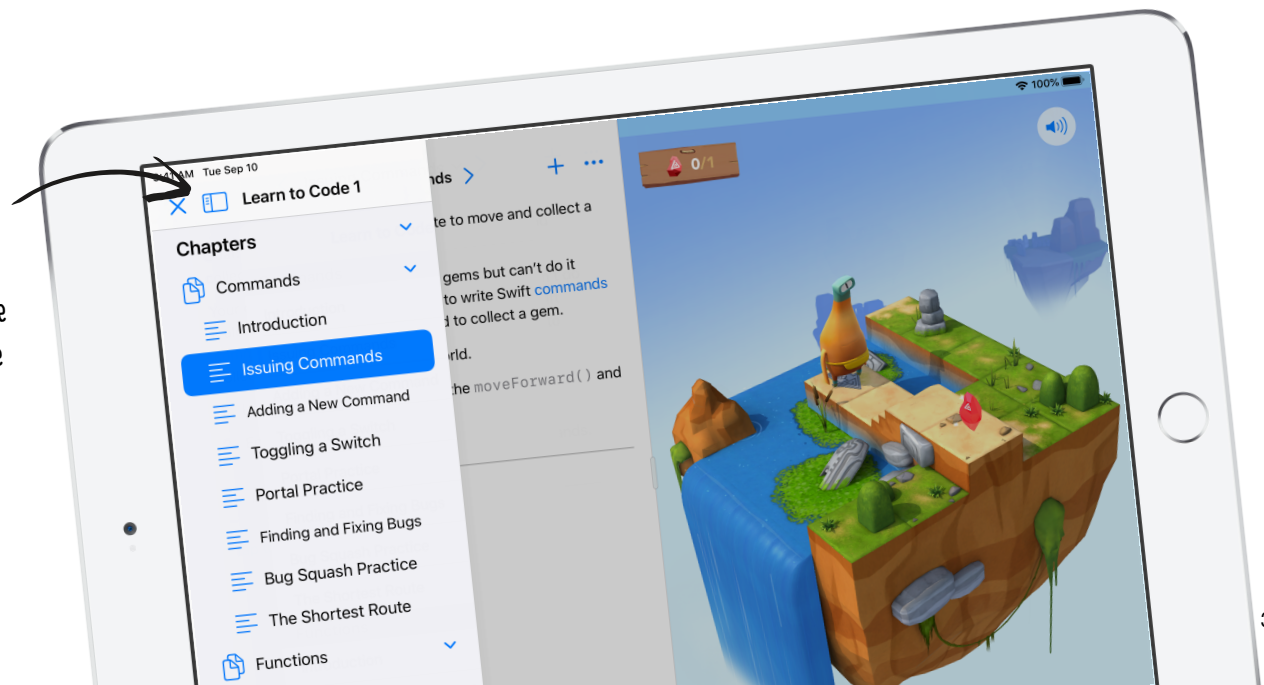


Open the Learn to Code 1 playground. Watch the introduction to For Loops, then try these puzzles:

- Using Loops
- Looping All Sides



Tap to open the sidebar to see all playground pages. Tap a page or use the arrows to navigate between pages.

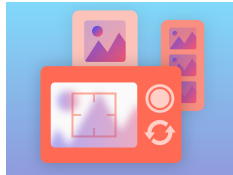


## 5 Code your camera

Connect built-in components to create a camera and view photos on iPad.

### Lights, Camera, Code

iPad only



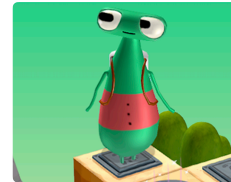
Open the Lights, Camera, Code playground. Watch the introduction, then try:

- Starting with a Camera
- Seeing Your Photos

## 6 Track the gems

Use variables to keep count of the gems that Byte collects.

### Learn to Code 2



Open the Learn to Code 2 playground. Watch the introduction to Variables, then try these puzzles:

- Keeping Track
- Bump Up the Value

## 7 Draw with spirals

Create unique spiral art by changing variables.

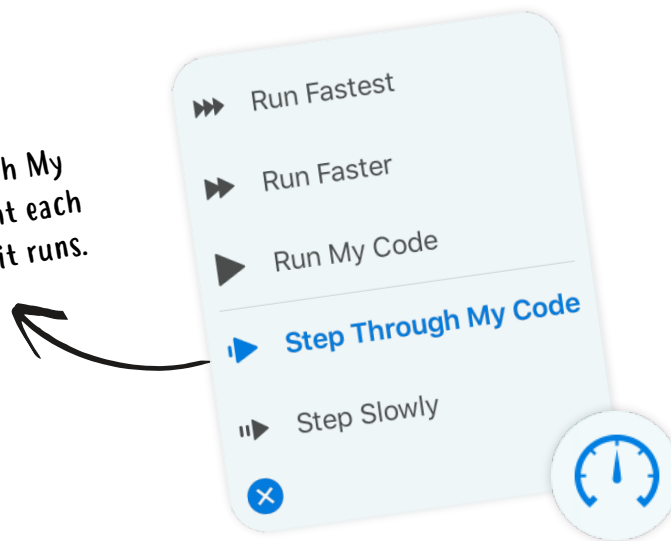
### Spirals



Open the Spirals playground. Explore the overview, then skip to Playtime to make your own design:

- Overview
- Playtime

Use Step Through My Code to highlight each line of code as it runs.



Speed up or slow down your code by tapping the speedometer icon.



## 8 Control the portals

Learn about types in Byte's world and alter the properties of portals to switch them off and on.

### Learn to Code 2



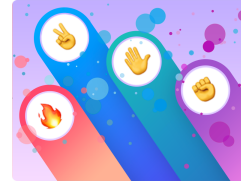
Open the Learn to Code 2 playground. Watch the introduction to Types, then try this puzzle:

- Deactivating a Portal

## 9 Play your own game

Code your own personalised Rock, Paper, Scissors game.

### Rock, Paper, Scissors



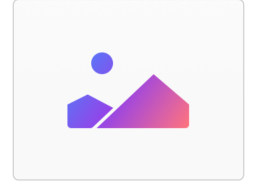
Open the Rock, Paper, Scissors playground. Read the game rules, then explore:

- Creating a Game
- Sample Game

## 10 Create with shapes

Create your own interactive project with shapes that move and change colour when you tap.

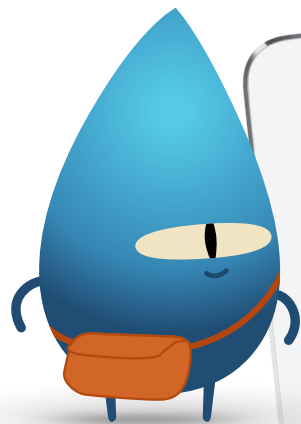
### Shapes



Open the Shapes playground. Experiment with adding shapes, images, text and animations in:

- Shape Graphics
- Touches and Animations

Drag the live view across to play your game in full screen.



# Keep learning



## Everyone Can Code

Download [Everyone Can Code Puzzles](#) in Apple Books to go even further with Swift Playgrounds and explore the concepts behind your code. The guide includes fun activities to help you build on what you already know, experiment with code, apply your understanding and learn more about the role of coding in our lives.

## Swift Coding Club

Want to keep coding with friends? Check out the [Swift Coding Club](#) resources for kids, parents or teachers to start your own after-school, lunchtime or holiday coding club with Swift Playgrounds.

