

Student workbook

A guide to EduBlocks

Code Playground



A guide to EduBlocks

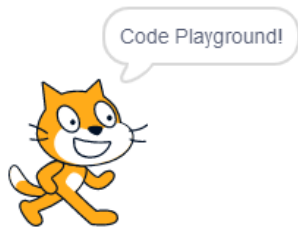
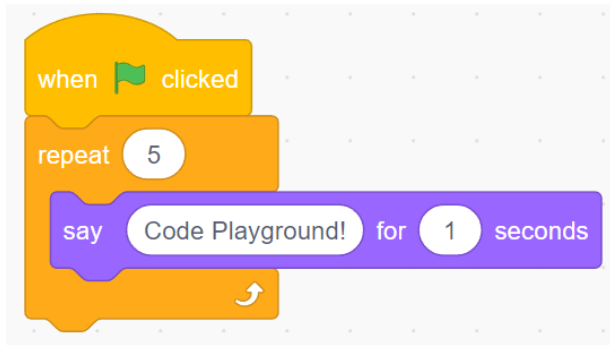
EduBlocks is a free tool, designed to help with the transition from block-based coding to text-based coding, using a similar block method as seen on the Scratch platform.

EduBlocks will run in your browser, just like Scratch, so there's no need to install or download any software, or create any accounts. However, you will need to access <https://trinket.io/> for your code to run.

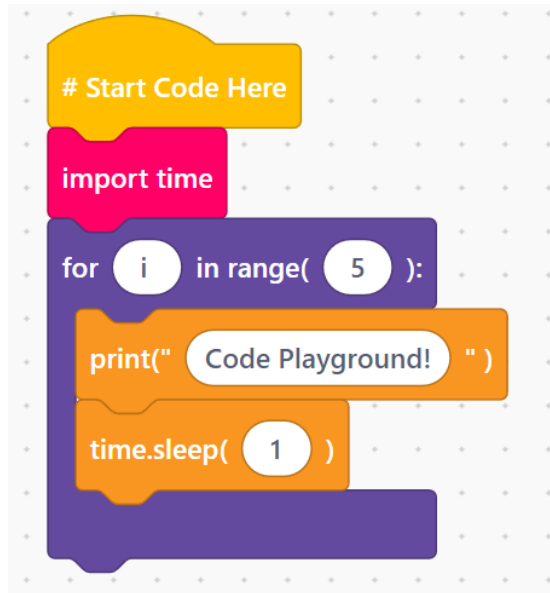
The below examples of code will print 'Code Playground!' on the screen five times to demonstrate the differences between Scratch, EduBlocks and Python.

Visit <https://edublocks.org/> then 'Editor' from the Homepage menu to get started.

Scratch

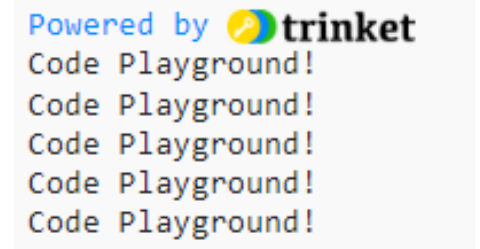


EduBlocks



Python

```
1 # Start Code Here
2 import time
3 for i in range(5):
4     print("Code Playground!")
5     time.sleep(1)
```



Select a mode

To start coding, click on the mode you wish to use. We will be working with Python 3 for our projects.

Let's get started!

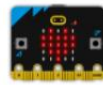
Select a mode below to get coding with EduBlocks



Python 3



HTML



BBC micro:bit



CircuitPython



Raspberry Pi

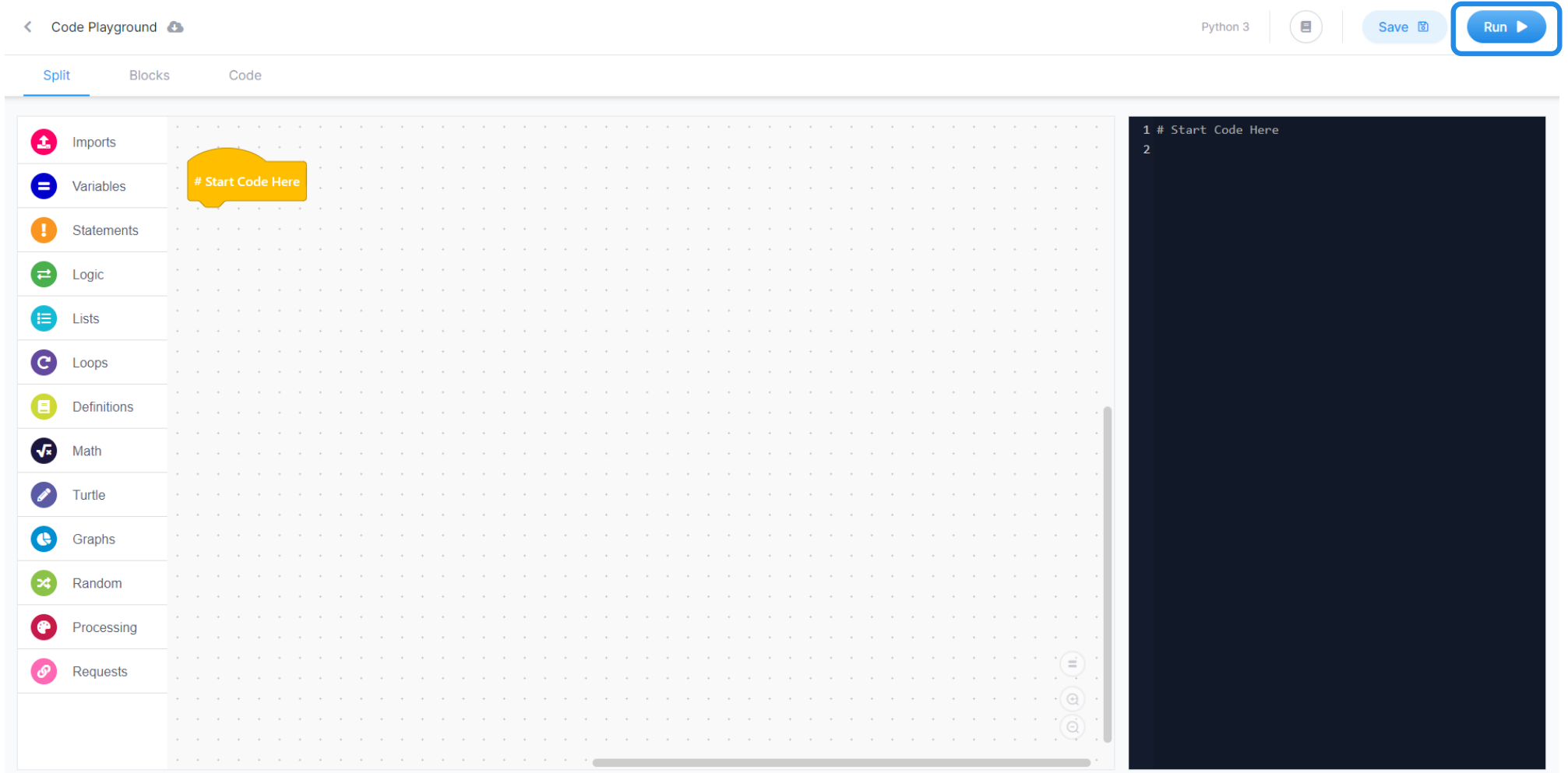
Text Only

Filename
Code Playground

Start Coding

Coding screens

The EduBlocks interface is simple and follows the same principles as Scratch. Colour coded function blocks can be selected and dragged into the coding area on the left and the Python code will be displayed on the right of the screen. When you have finished your code, press Run in the top right of the screen.



Viewing the output

You can then see the blocks, Python code and the output. There is the option to also write your code purely in Python.

The screenshot shows a web-based code editor interface. At the top left, there is a back arrow and the text "Code Playground". At the top right, there are three buttons: "Save", "Popout", and "Stop". Below these are tabs for "Split", "Blocks", and "Code".

The main workspace is divided into three vertical panels:

- Left Panel (Blocks):** A sidebar on the far left lists various categories: Imports, Variables, Statements, Logic, Lists, Loops, Definitions, Math, Turtle, Graphs, Random, Processing, and Requests. The main area shows a block-based code structure:
 - A yellow block: "# Start Code Here"
 - A pink block: "import time"
 - A purple loop block: "for i in range(5):"
 - Inside the loop, an orange block: "print(" Code Playground! ")"
 - Below the loop, another orange block: "time.sleep(1)"
- Middle Panel (Code):** A dark background with Python code:

```
1 # Start Code Here
2 import time
3 for i in range(5):
4     print("Code Playground!")
5     time.sleep(1)
6
```
- Right Panel (Output):** A white background with the text "Powered by trinket" and five lines of "Code Playground!" stacked vertically.

Notes

Code Playground

Barclays Bank UK PLC is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (Financial Services Register No. 759676). Registered in England, Registered No. 9740322. Registered Office 1 Churchill Place, London E14 5HP.