### Python programming 5 Challenges













# We are using 2 platforms for this: code club

https://projects.raspberrypi.org/en/pathways/python-intro

### **And trinket**

https://trinket.io/

To set yourself up, open both of these websites in separate browser tabs.

Create an account for yourself in each, and be sure to remember the password.



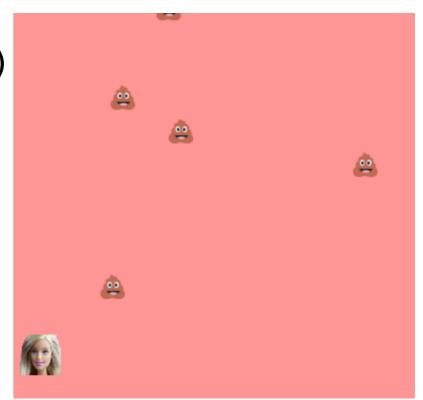
If you haven't done week 1, first have a go at that.

Then have a go at week 2 (target practice)

Then have a go at week 3 (rocket launch)

Then have a go at week 4 (make a face)

AND FINALLY let's make a game!





# CHALLENGE ONE Getting started

#### **BRONZE:**

Decide what you want your player to be and find/choose/make a character. Get it to follow the mouse pointer.

Once you've done this, share with a robot club helper who can confirm you have Bronze before continuing.



## CHALLENGE ONE Obstacle city

#### **SILVER:**

Decide what kind of obstacles you want and draw one.

Make it scroll down the screen.

Make it reappear at the top, using %=

Then, using the random seed, turn it into a larger number of obstacles.

Share your project again



### CHALLENGE ONE Collisions

#### GOLD:

Implement simple collision detection (single point)

Well done, you've done the basics... now to take it further!



#### **CHALLENGE TWO**

### Going further: pick an extra activity or two

- Improve your collision detection
- Give yourself a score (a global variable)
- Give yourself levels
  - Game could get faster
  - Obstacles could get bigger
  - There could be more obstacles
  - Player could get larger
  - Obstacles could get larger

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