CoderDojo Athenry

"Above all, be cool"

Every week:

✓ Sign in at the door

If you are new:

✓ Fill in Registration Form

✓ Ask a Mentor how to get started

Make sure you are on the Athenry Parents/Kids Google Group: email coderdojoathenry@gmail.com

Weekly Reminders

- **Fire exit doors/main doorways must be kept clear AT ALL TIMES**

- **In the case of an emergency , please proceed in a calm and orderly manner to the nearest Exit and go to your Assembly Point**

Do NOT take anything with you
If you have a child in another room, do NOT go to them, a Mentor will look after them

- **Please leave passageways between desk and keep CLEAR at all times**

- **If power cable goes across passageways – must be TAPED DOWN ask mentor for tape**

- **ONLY NINJAS need a table - parents, please only use a chair**

- **If FIRST AID is required please alert a Mentor**

There are a number of trained first responders on site every week

€2

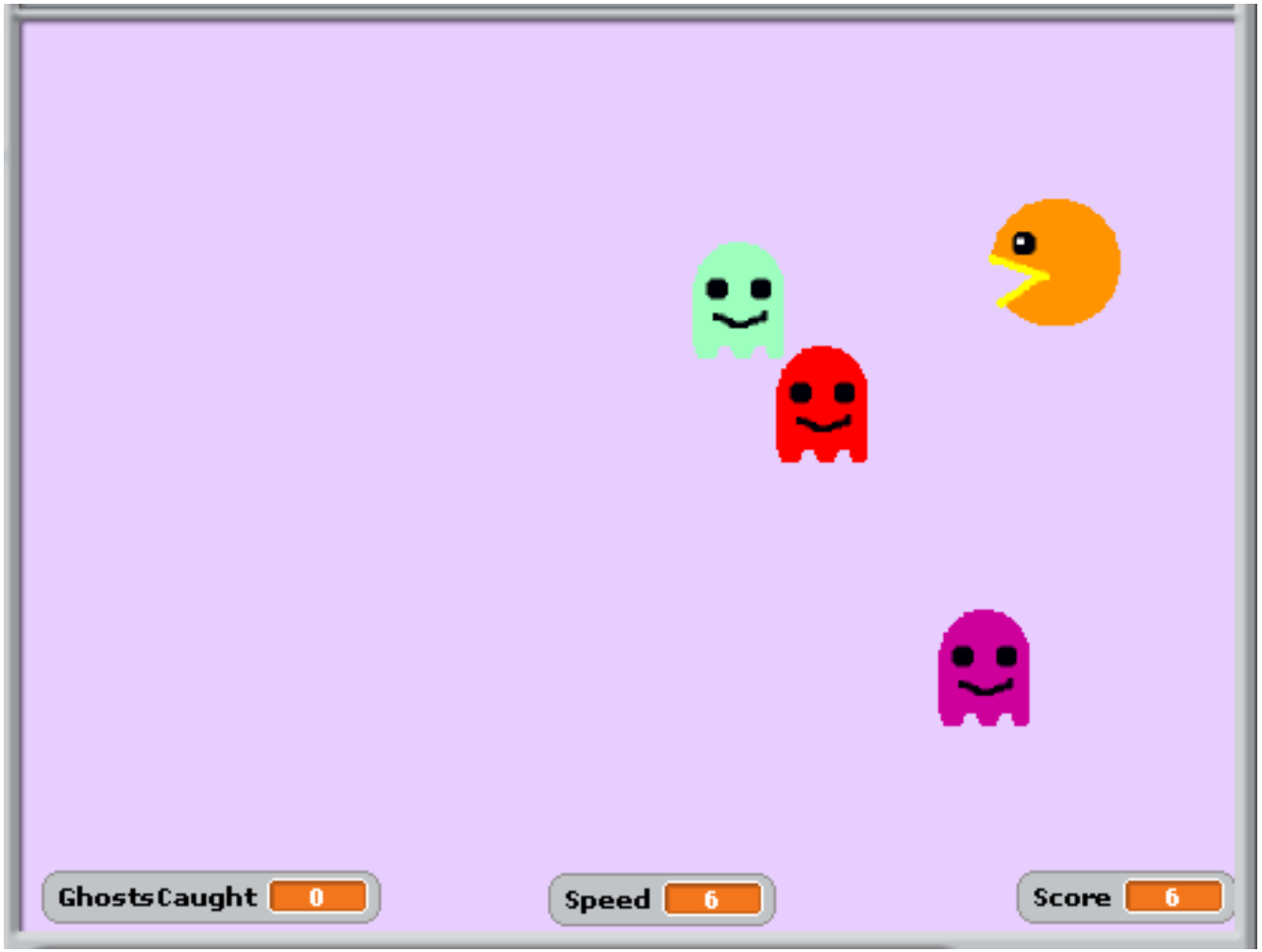
Help us cut down on Single Use Cups

Bring your own cup (must have lid)

€1.50

+

Today's Ninja Challenge:
Create a GhostBuster Game Like This



Today's Big Ideas

Designing your game

Loops & Decisions

Variables

How to Get Started

Plan the Design

- Think first!
- Start simple: add more later

Create First Character

- Design it: appearance & behaviours
- Write script (Code) to control its behaviours

Test It

- Any bugs? (Not working as expected)
- Debug and Improve

Extend It

- More Characters, More Behaviours, More Testing!

Steps To Make This Game

Create your **Ghost Catcher**: appearance?

Code to control it with mouse

Change the **Stage**:
Plain coloured background?

Create first **Ghost**: appearance & code

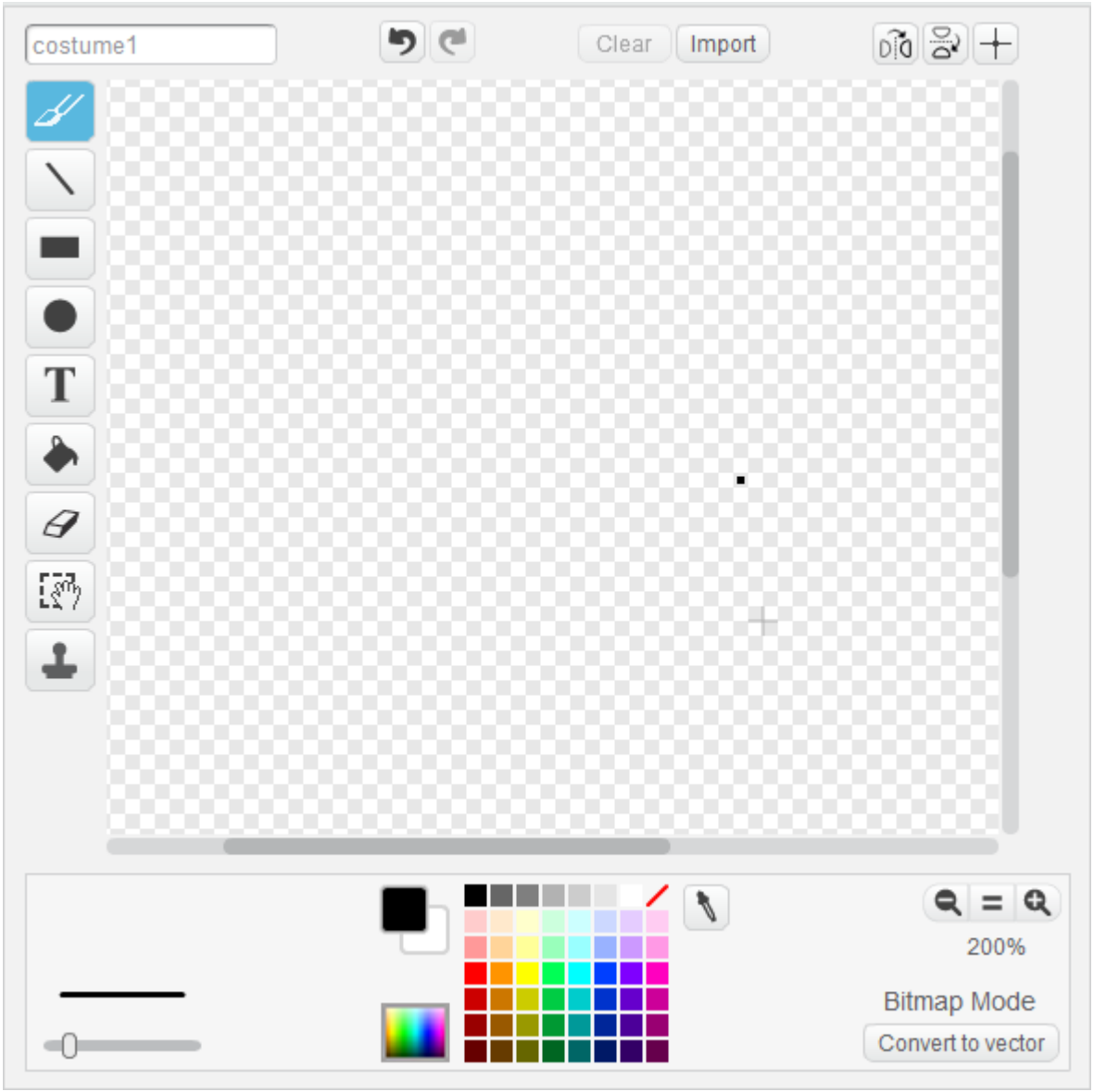
Duplicate it when it is working

Make things happen when
a Ghost is **caught**

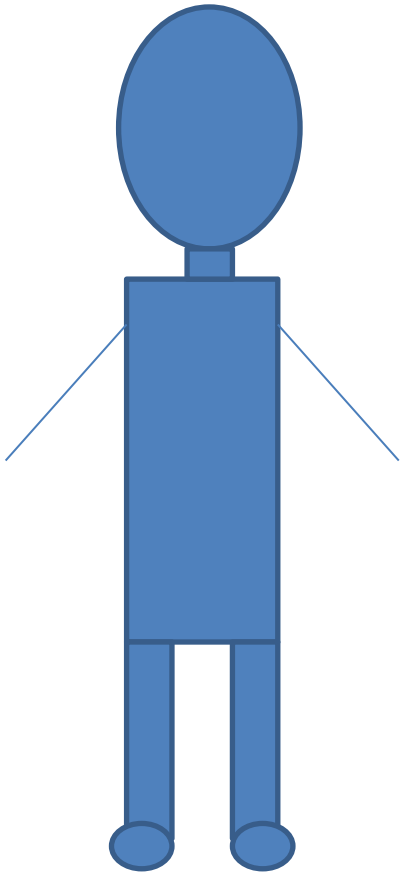
Add **variable** for **Score**

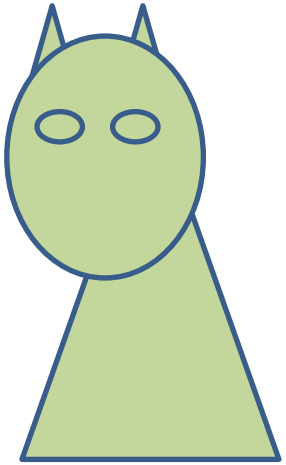
Optional: New **level** when all caught

Paint Editor in Scratch

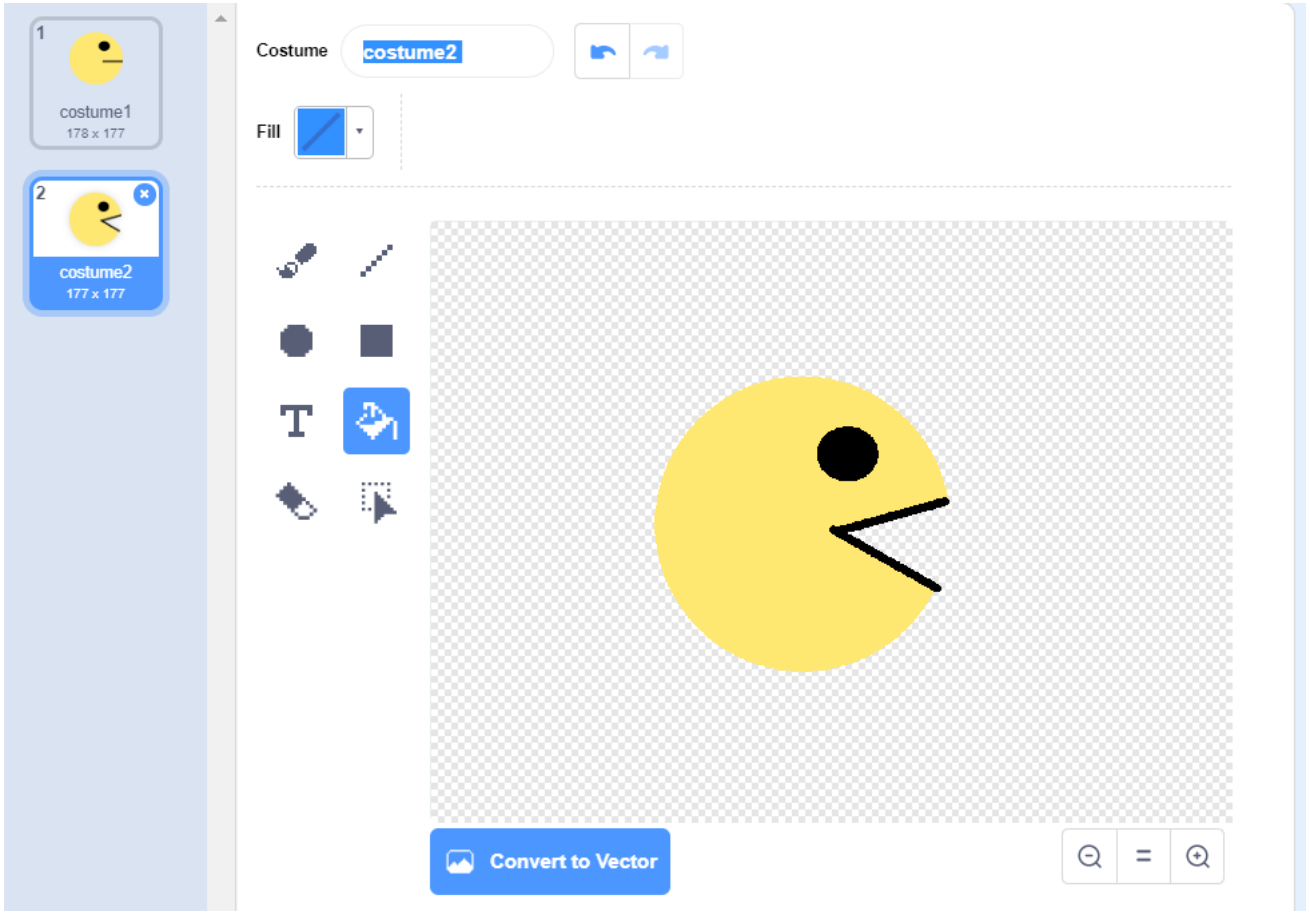


Think in Shapes



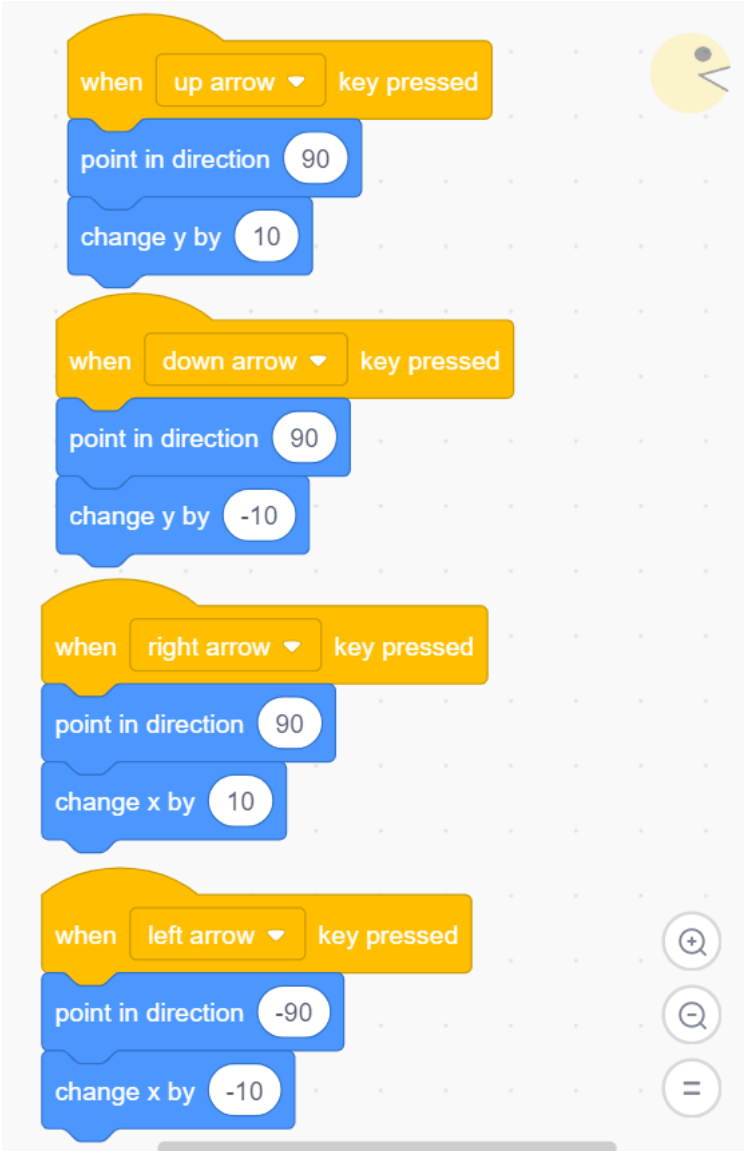


Design PacMan and a Ghost



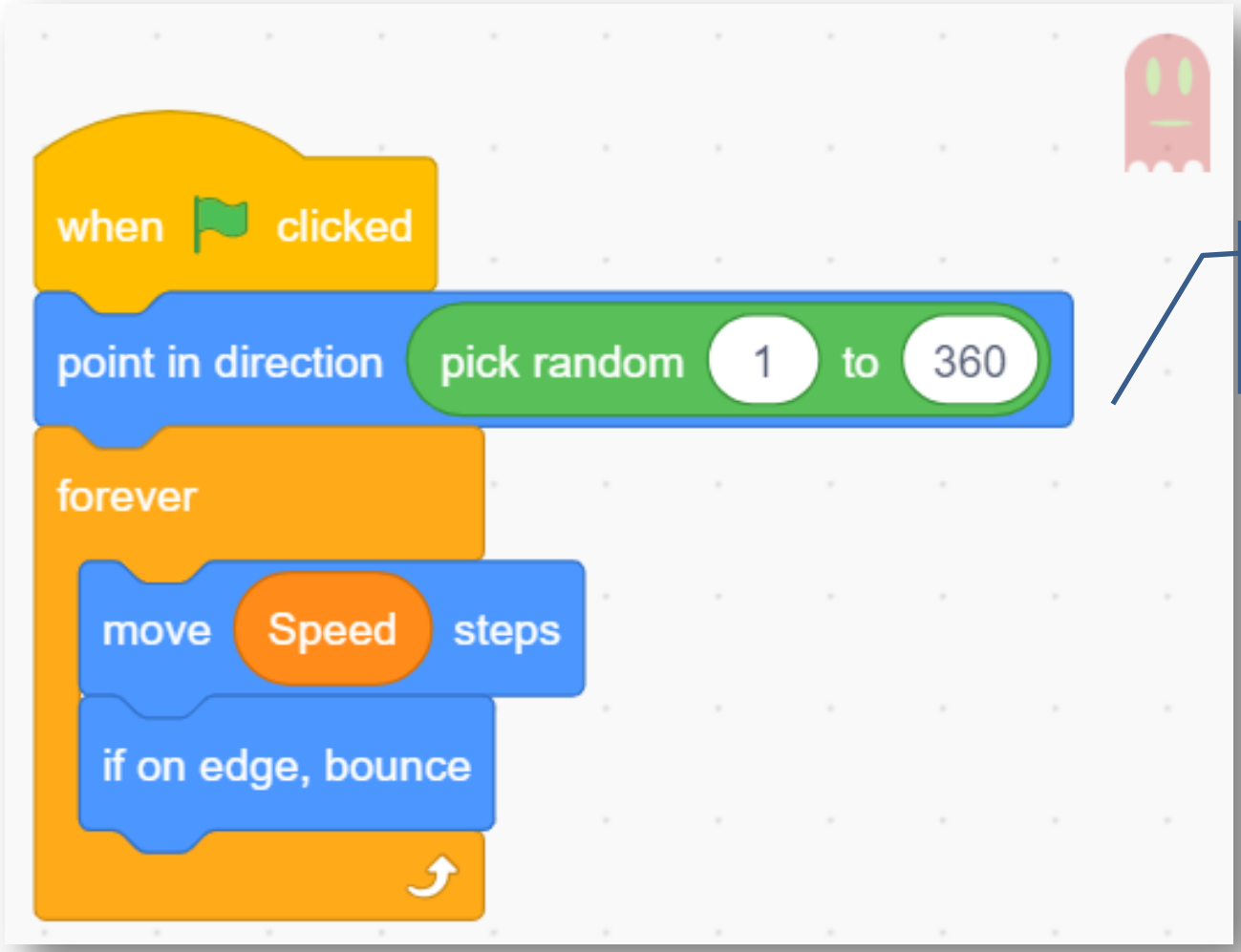
Circles, Rectangle & Paintbrush

TIP: Use distinctive colour (e.g. yellow) at front/mouth: will use this when detecting if ghost is eaten



Make PacMan Move using Arrow Keys

Make Ghost Move Around



What is significance of 1-360?

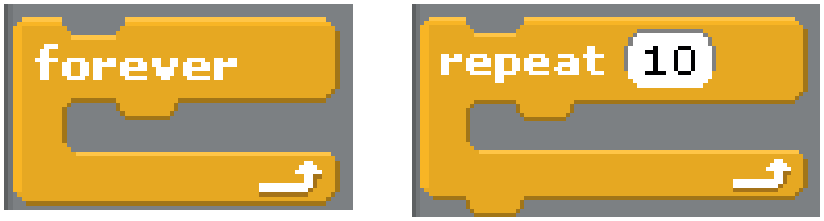
TIP: Get one ghost working fully – you can duplicate it later.
Right-click on a sprite to duplicate it.

Loops and Decisions

Key programming concepts

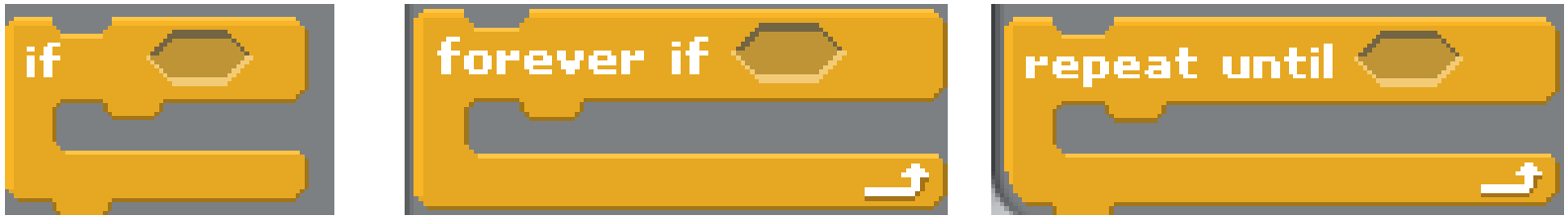
Loop:

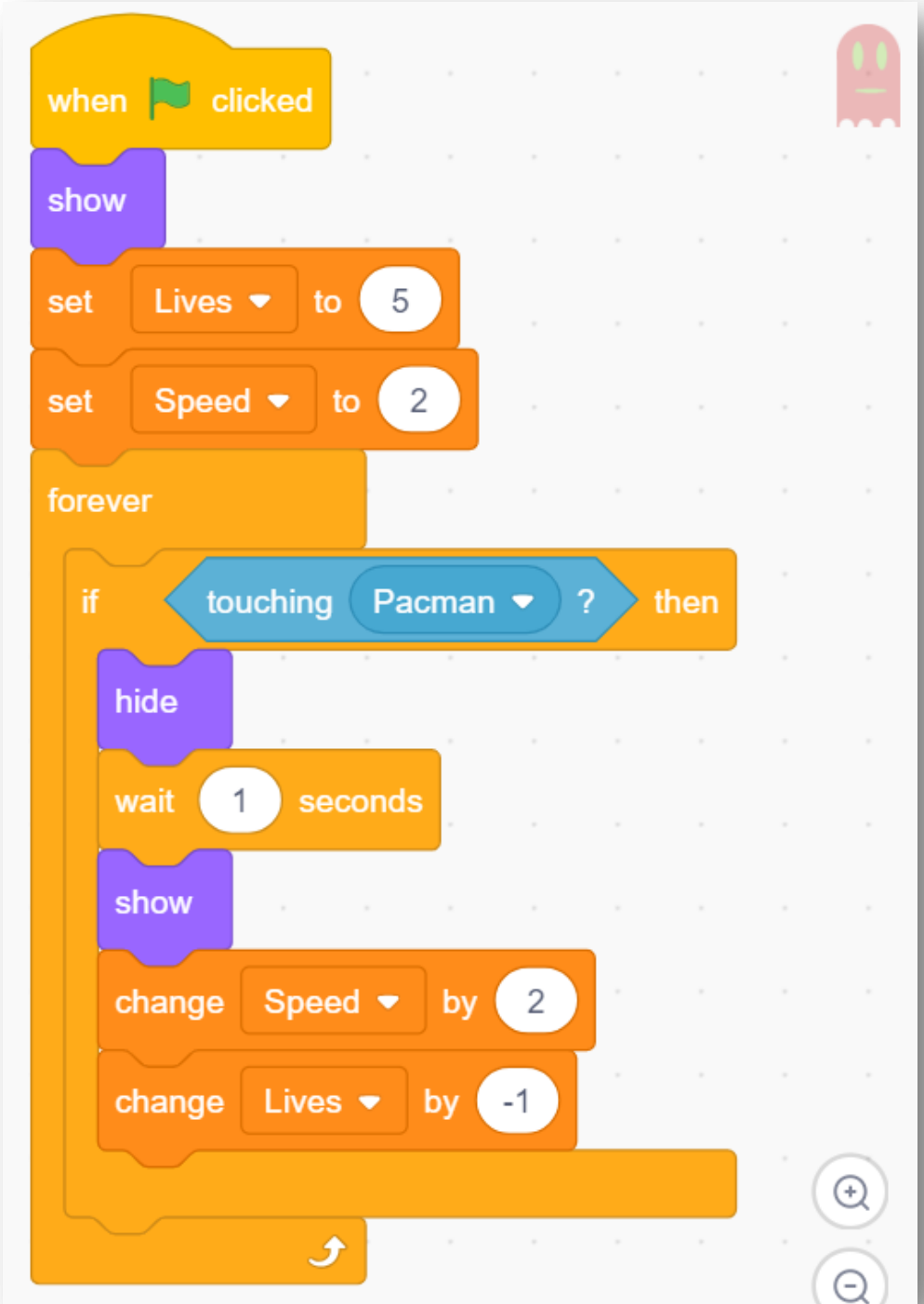
Repeat code multiple times

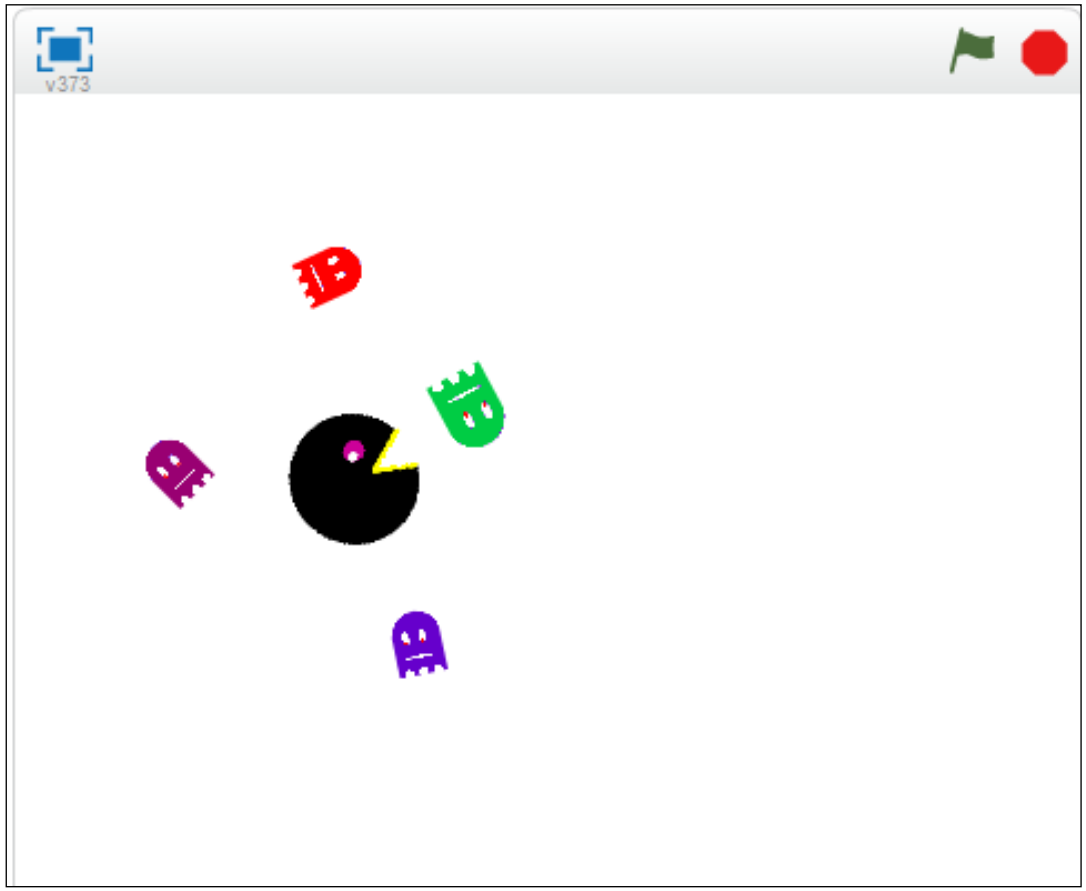


Decision:

Decide whether or not to do something





When PacMan Gets caught by Ghost …

Duplicate Ghost, Make Each One Look Different