

CoderDojo Athenry



EXPLORERS

Code and Notes by Martha Fahy, 2020

How to Get Started

Make a plan



Start Simple..then add to it

Create your *First Sprite*

What will it look like,
..how will it behave



Write Code (instructions) to
control it



Test it

Any bugs (mistakes/errors)

Fix them

And test again!



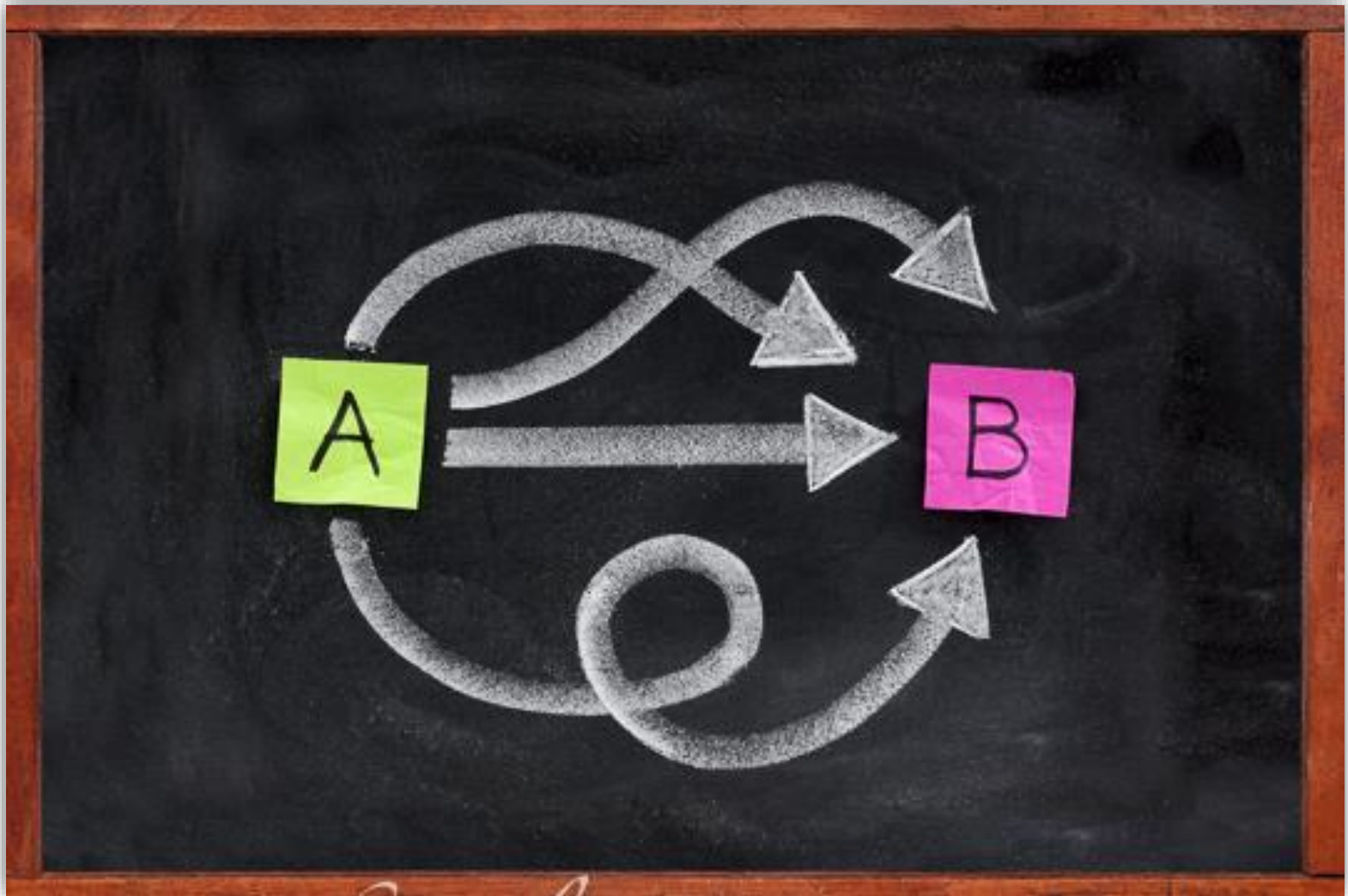
Add to it

More sprites

More behaviours

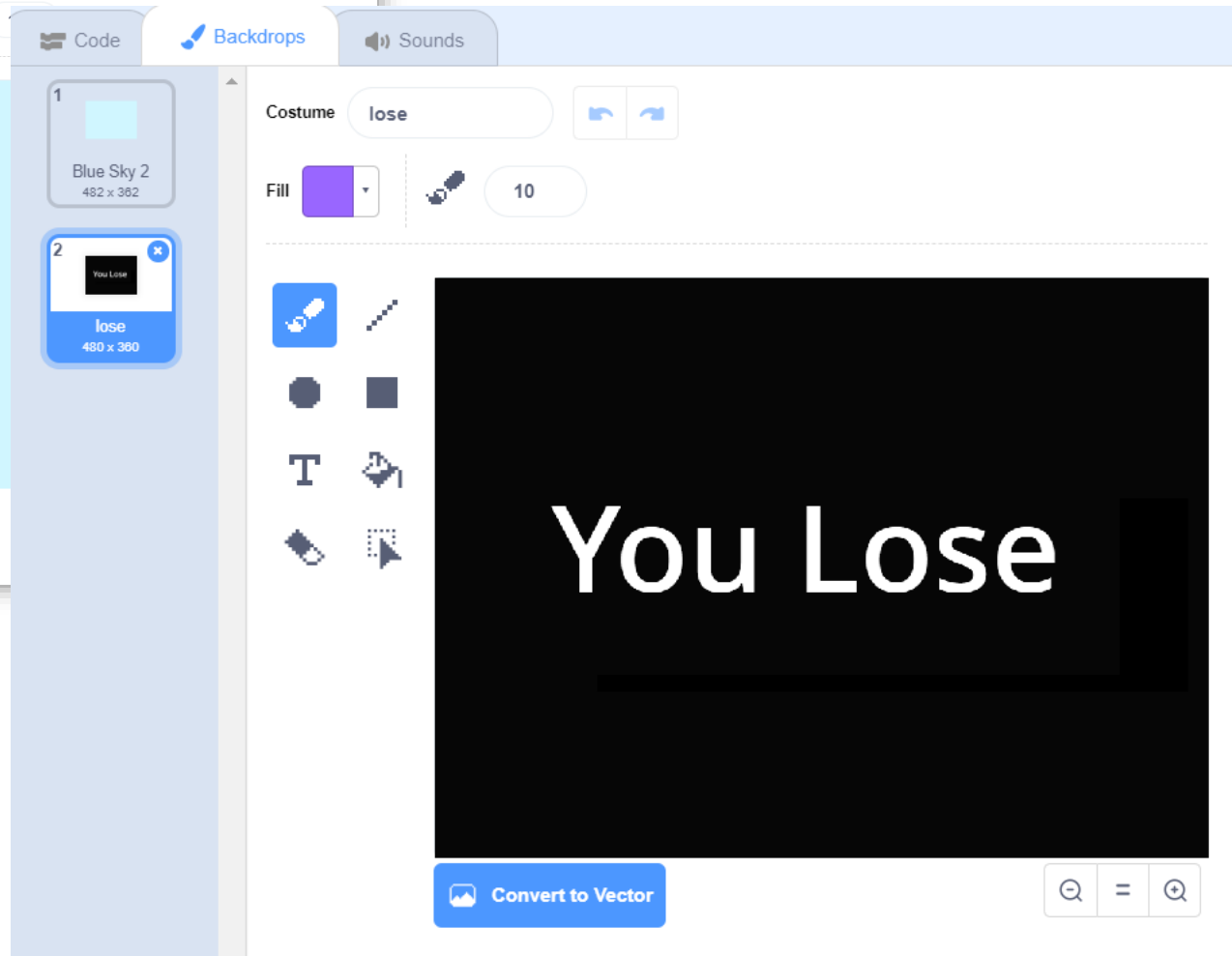
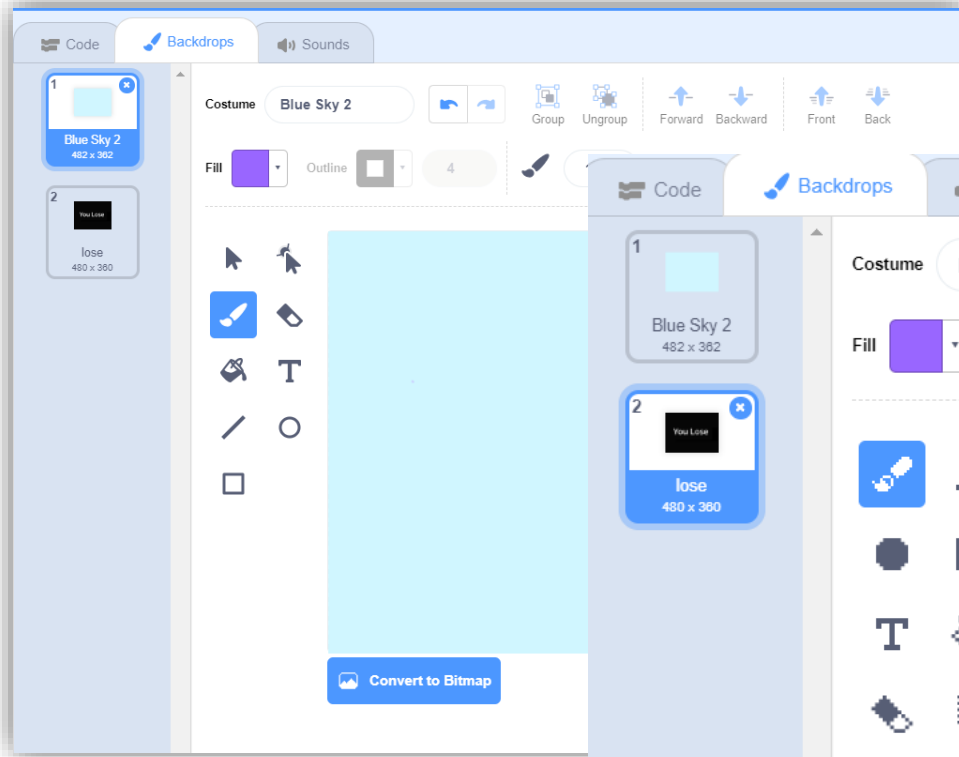
And test again!

There's More than One Way to Do it



Change the Background

Make 2



Create a Sprite

Balloon3

Balloon4

Backdrops

2

Choose a Sprite

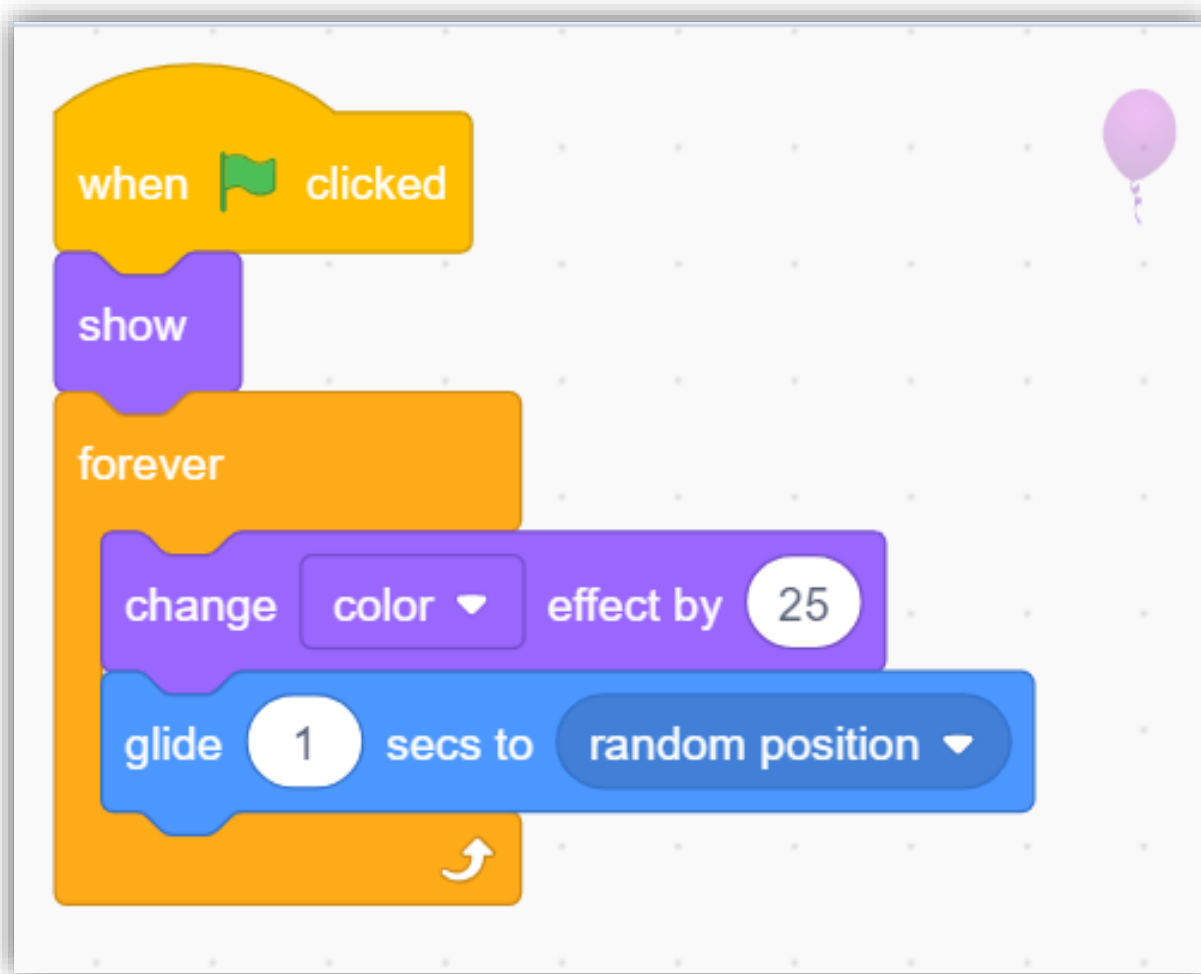
Vertical toolbar icons: Undo, Redo, Eraser, Search, Add Sprite (cat icon)

Choose a Sprite

Animals People Fantasy Dance Music Sports Food Fashion Letters

Andie	Anina Dance	Apple	Arrow1	Avery	Avery Walk...		
Balloon1	Bananas	Baseball	Basketball	Bat	Batter		
Beachball	Bear	Bear-walking	Beetle	Bell	Ben	Bowl	Bowtie

Make it Move Under its own Control



What happens
when you *POP*
it



Keep Track of Score/Lives

Need to make a variable

$$1 + x = 3$$



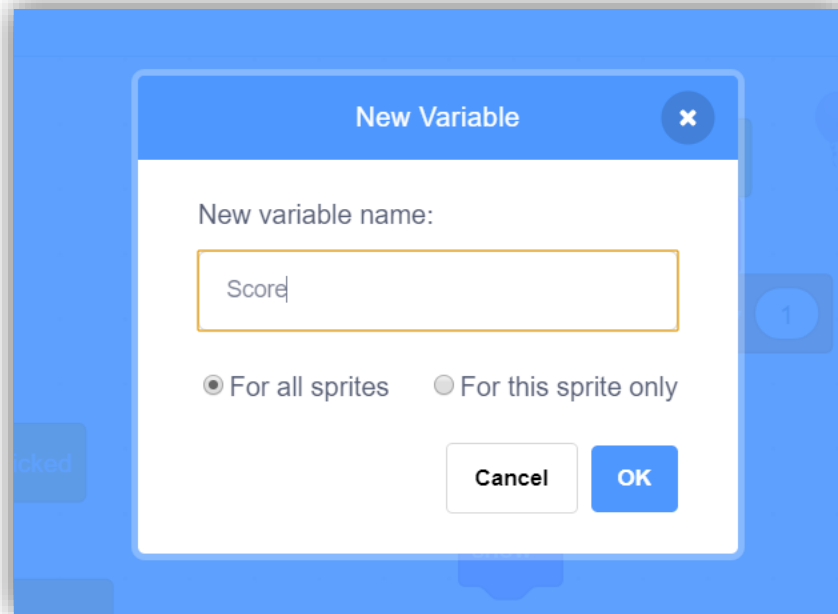
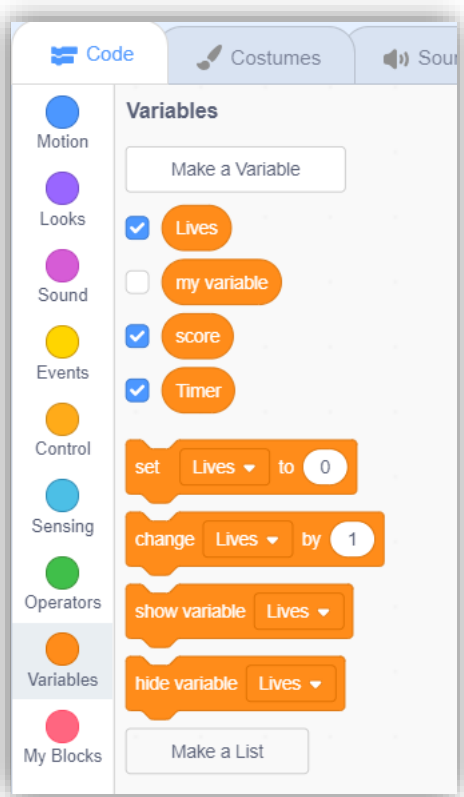
A variable is something that can be changed

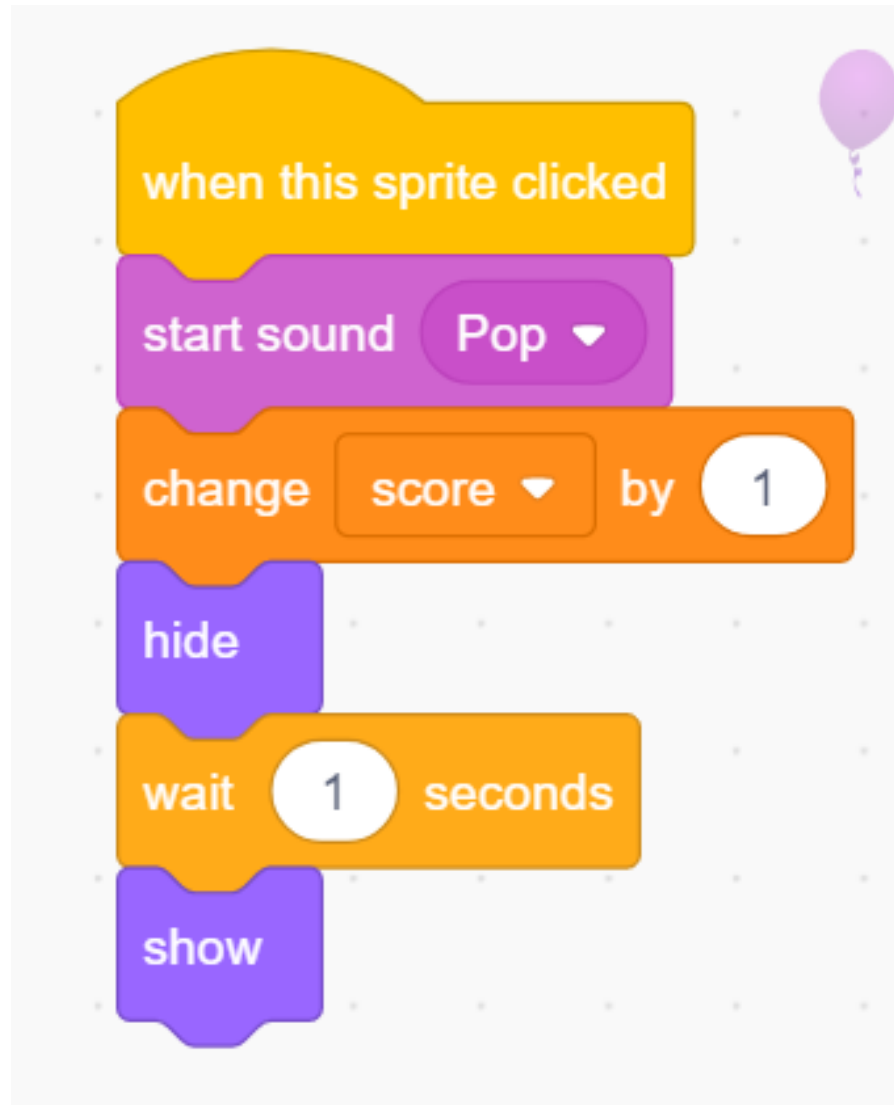


In computer programming we use variables to store information that might change and can be used later in our program.

Keep Track of Score

Need to make a variable





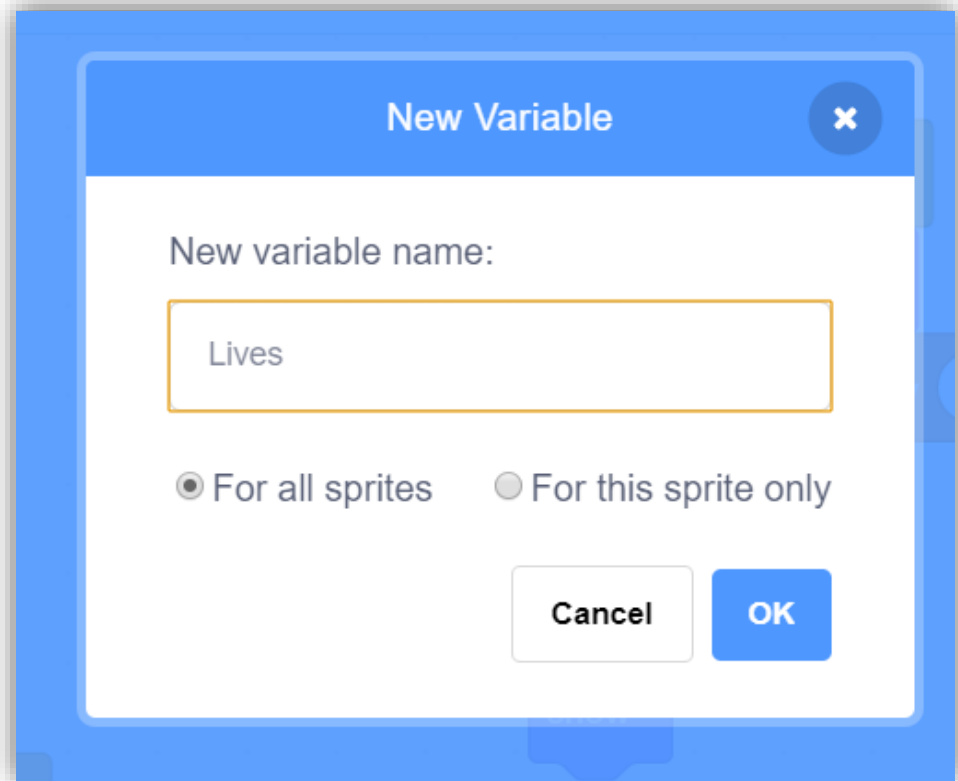
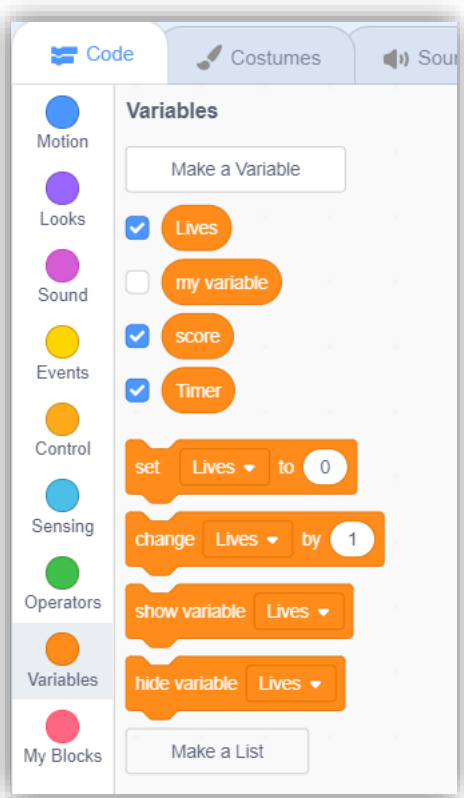
What happens
when you *POP*
it

Lets lose some Lives!!



Keep Track of Lives

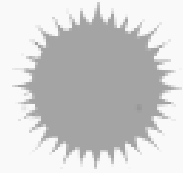
Need to make a variable

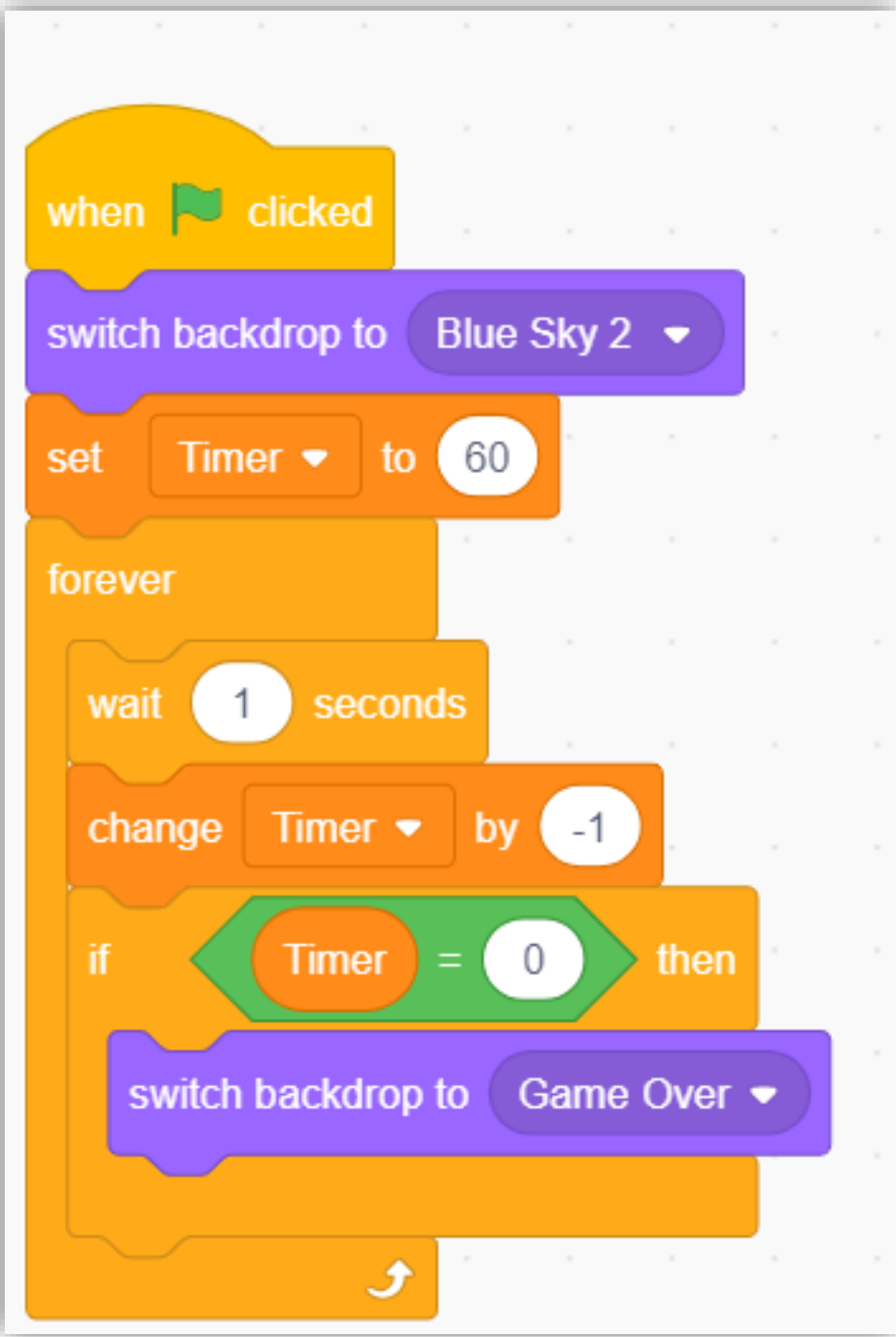


Now lets add the Code

```
when this sprite clicked
  start sound Ricochet
  change Lives by -1
  change size by 50
  wait 2 seconds
  hide
  wait 3 seconds
  change size by -50
  show
```

```
when green flag clicked
  show
  forever
    glide 1 secs to random position
```





```
when green flag clicked
  switch backdrop to Blue Sky 2
  set Timer to 60
  forever loop
    wait 1 seconds
    change Timer by -1
    if Timer = 0 then
      switch backdrop to Game Over
```

The image shows a Scratch script on a light gray grid background. The script starts with a yellow 'when green flag clicked' block. This is followed by a purple 'switch backdrop to Blue Sky 2' block. Next is an orange 'set Timer to 60' block. Below that is a large orange 'forever' loop block. Inside the loop, there are three blocks: an orange 'wait 1 seconds' block, an orange 'change Timer by -1' block, and an orange 'if Timer = 0 then' block. The 'if' block contains a purple 'switch backdrop to Game Over' block. The 'forever' loop block has a white arrow at the bottom right indicating it repeats.

Do you want to
add a **Timer**?