This is CS50

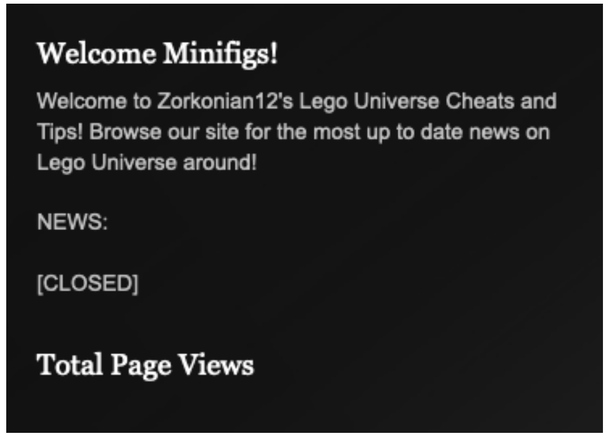
Week 0

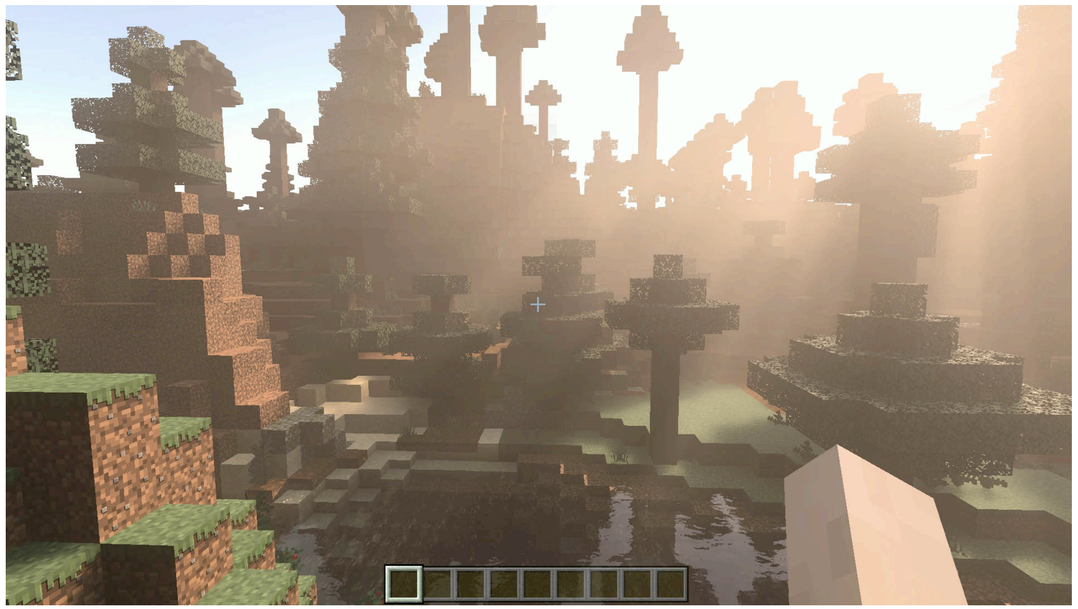
Scan your HUID for attendance at the back table.
Open scratch.mit.edu and log in!

Carter Zenke

Preceptor

carter@cs50.harvard.edu





Your turn!

- What brought you to CS50?
- What do you want to learn more about?

https://carterzenke.me/section

Rigor

Accessibility

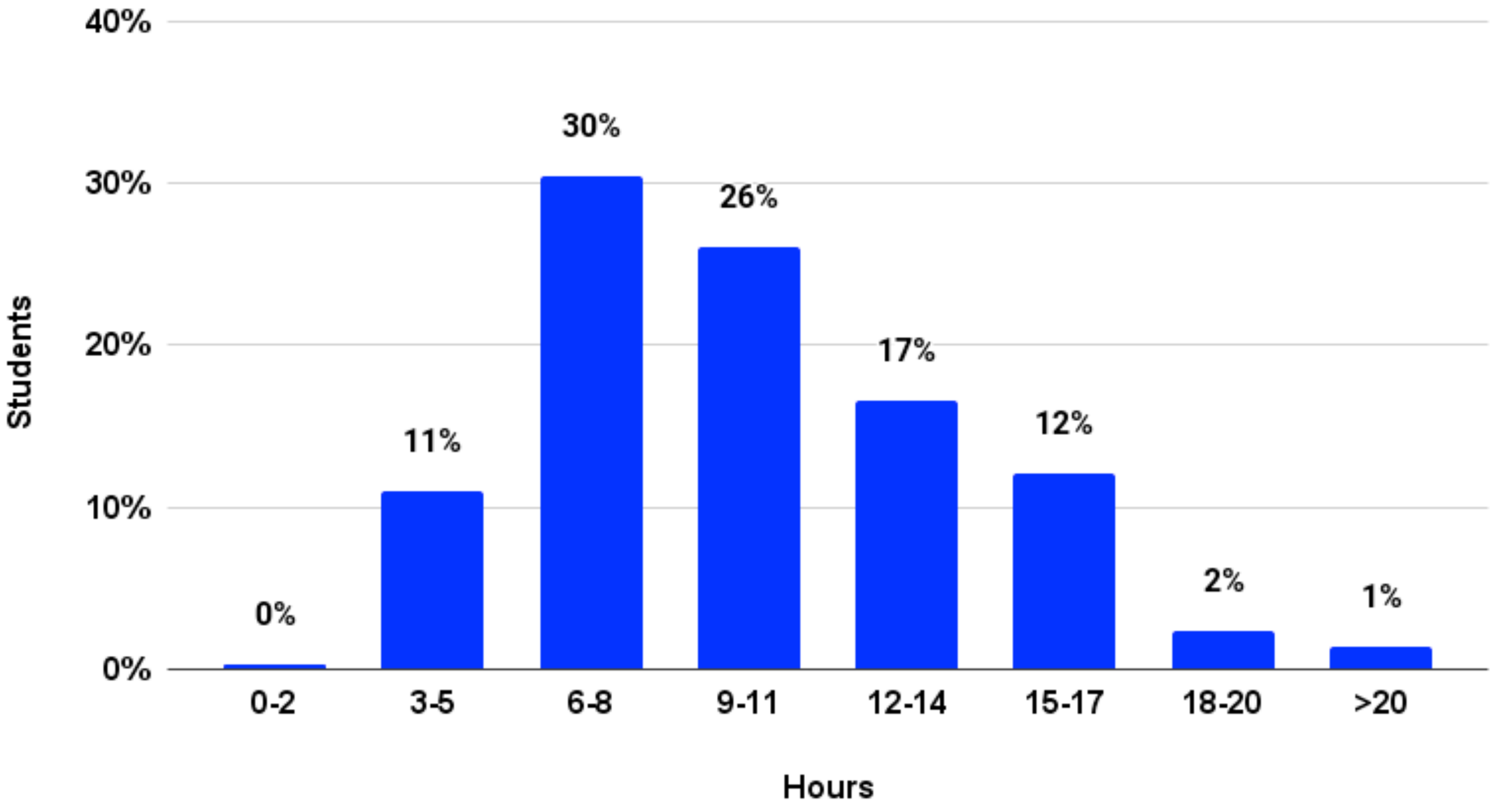
Community

Rigor

Accessibility

Community

"What ultimately matters in this course is not so much where you end up relative to your classmates but where you end up relative to yourself when you began."


40%
30%
20%
10%
0%
Students
30%
26%
17%
12%
11%
2%
1%
0%
0-2
3-5
6-8
9-11
12-14
15-17
18-20
>20
Hours

Honesty

- Read the course's academic honesty policy.
- When in doubt, ask.

It is *always* better to submit an incomplete problem set than one completed with the help of an online solution or walkthrough.

Honesty

- Read the course's academic honesty policy.
- When in doubt, ask.

The regret clause is available to you within 72 hours.

Rigor

Accessibility

Community

- Recorded lectures and shorts
- Sections
- Office hours
- Ed discussion platform

Rigor

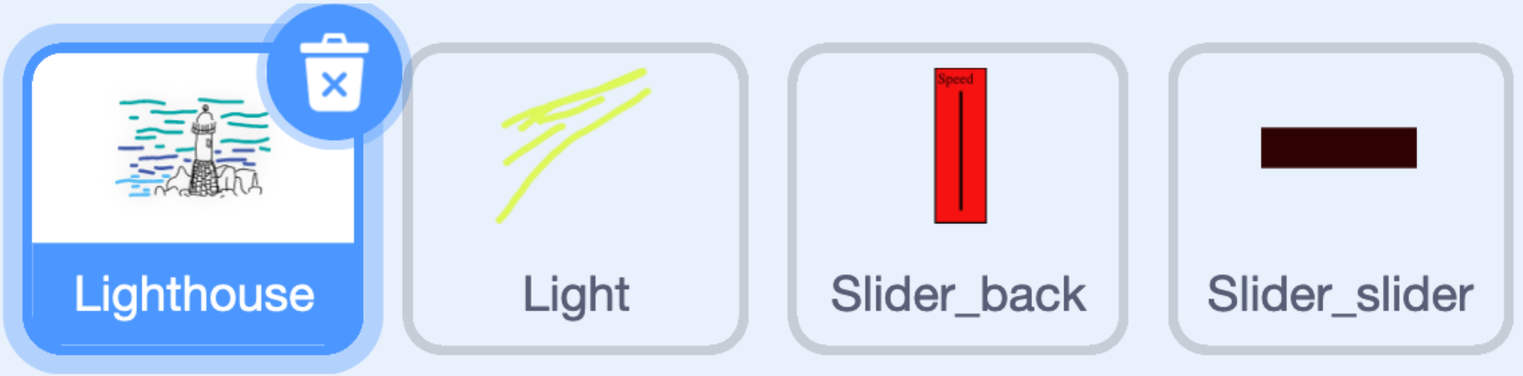
Accessibility

Community

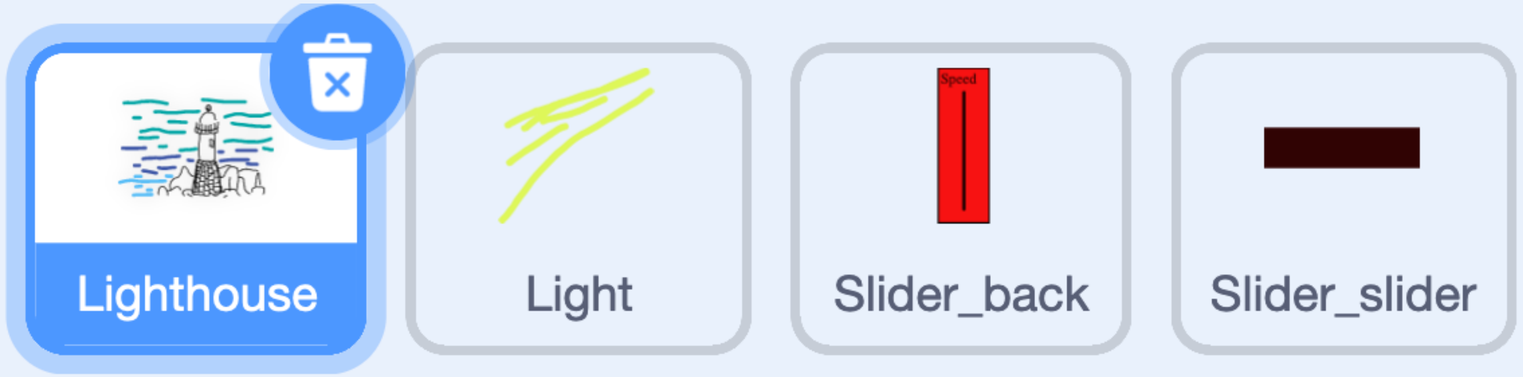
CS50

Scratch

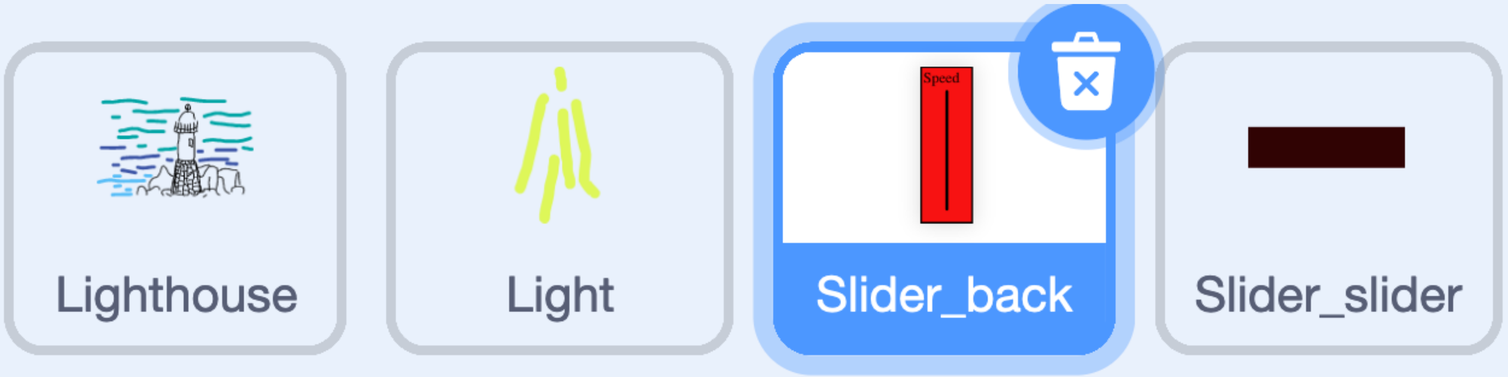
https://carterzenke.me/section


Lighthouse
Light
Speed
Slider_back
Slider_slider

Sprites



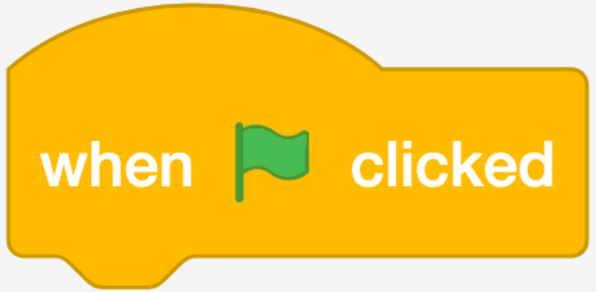
Sprites



What do you see when you change sprites?

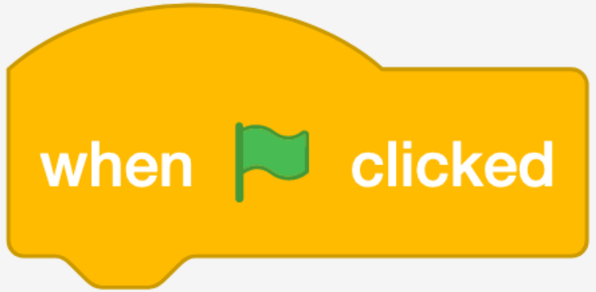
when
clicked

Event



Event

When this event occurs, run the given code.



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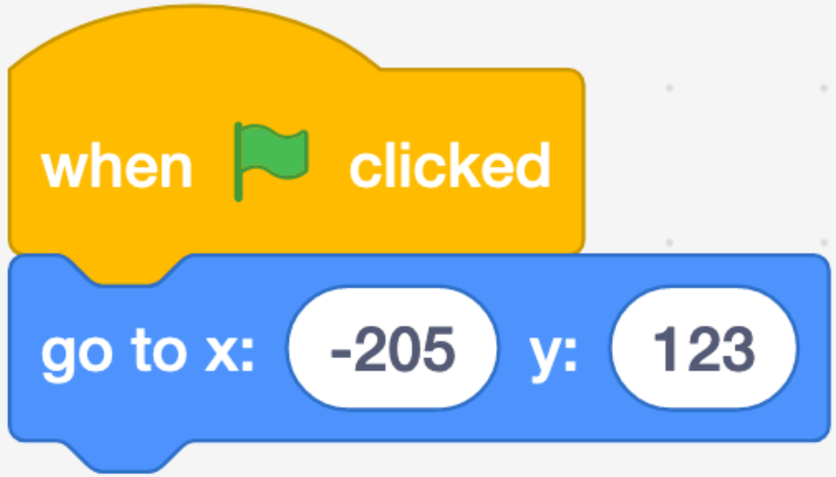
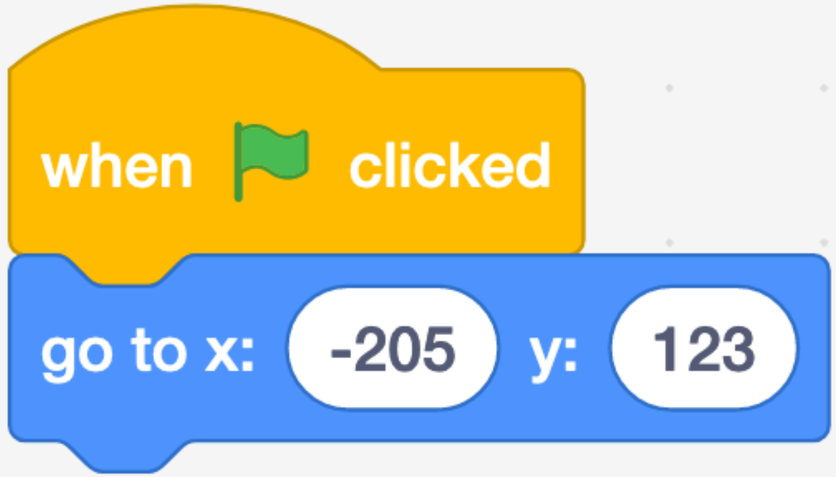
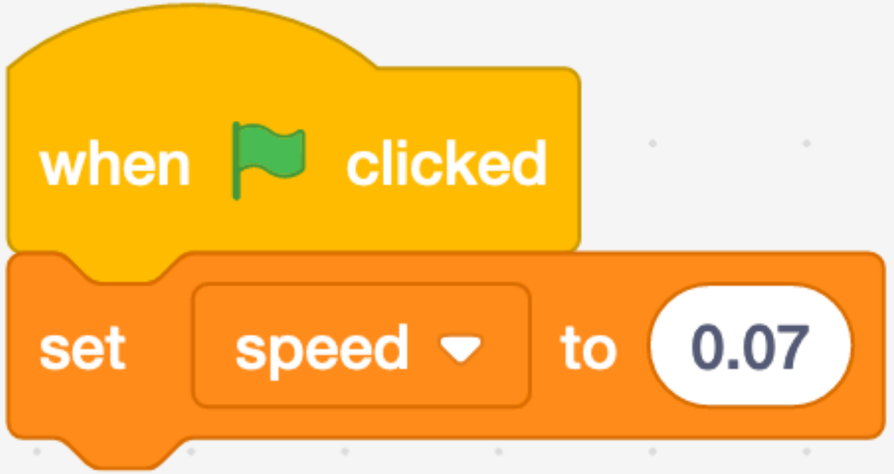


Event

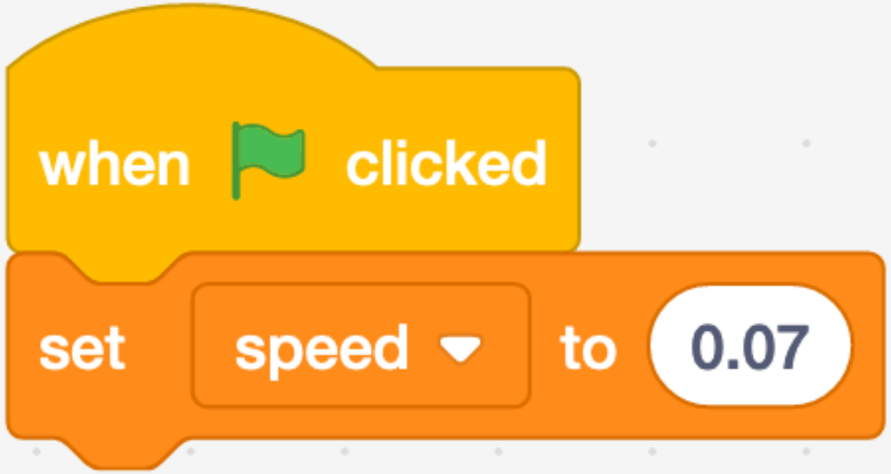
When this event occurs, run the given code.

What happens when you change **x** and **y**?



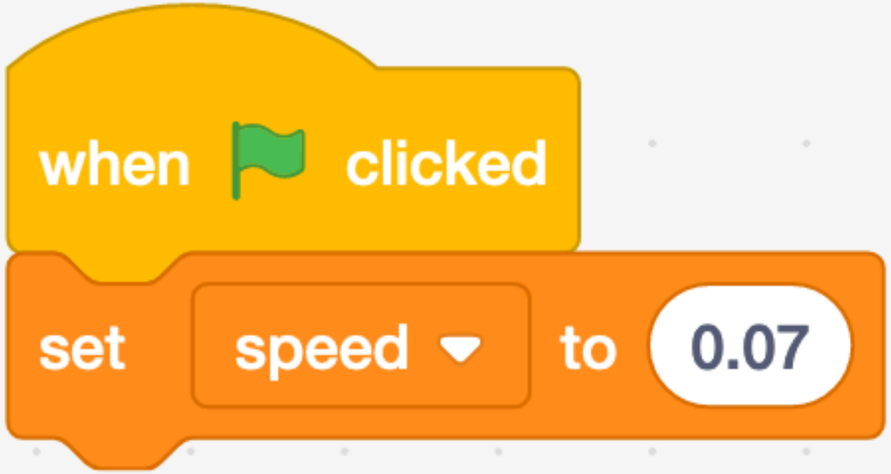

when clicked
set speed to 0.07

Variable



Variable

Set a value named **speed** to 0.07.



Variable

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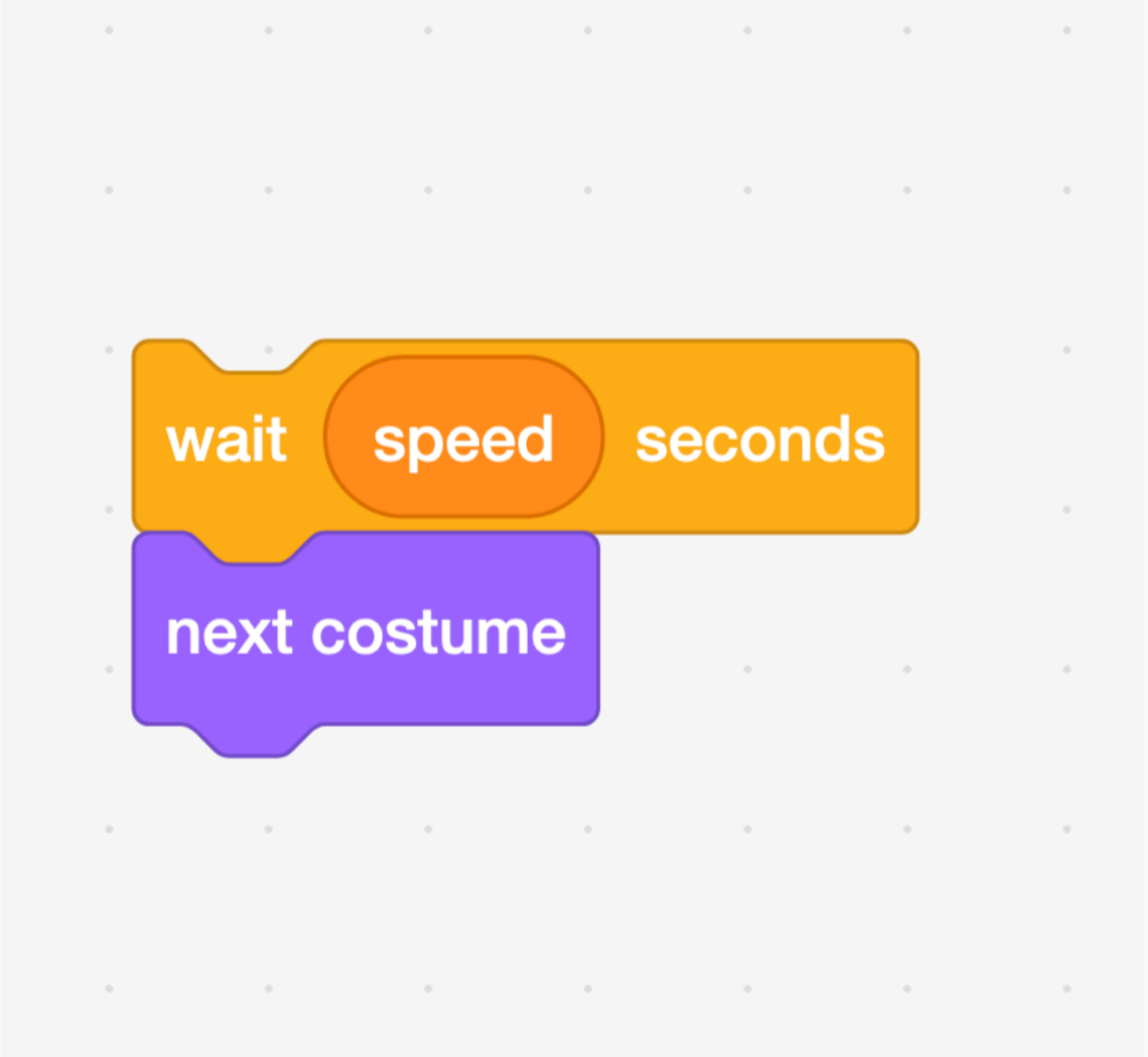
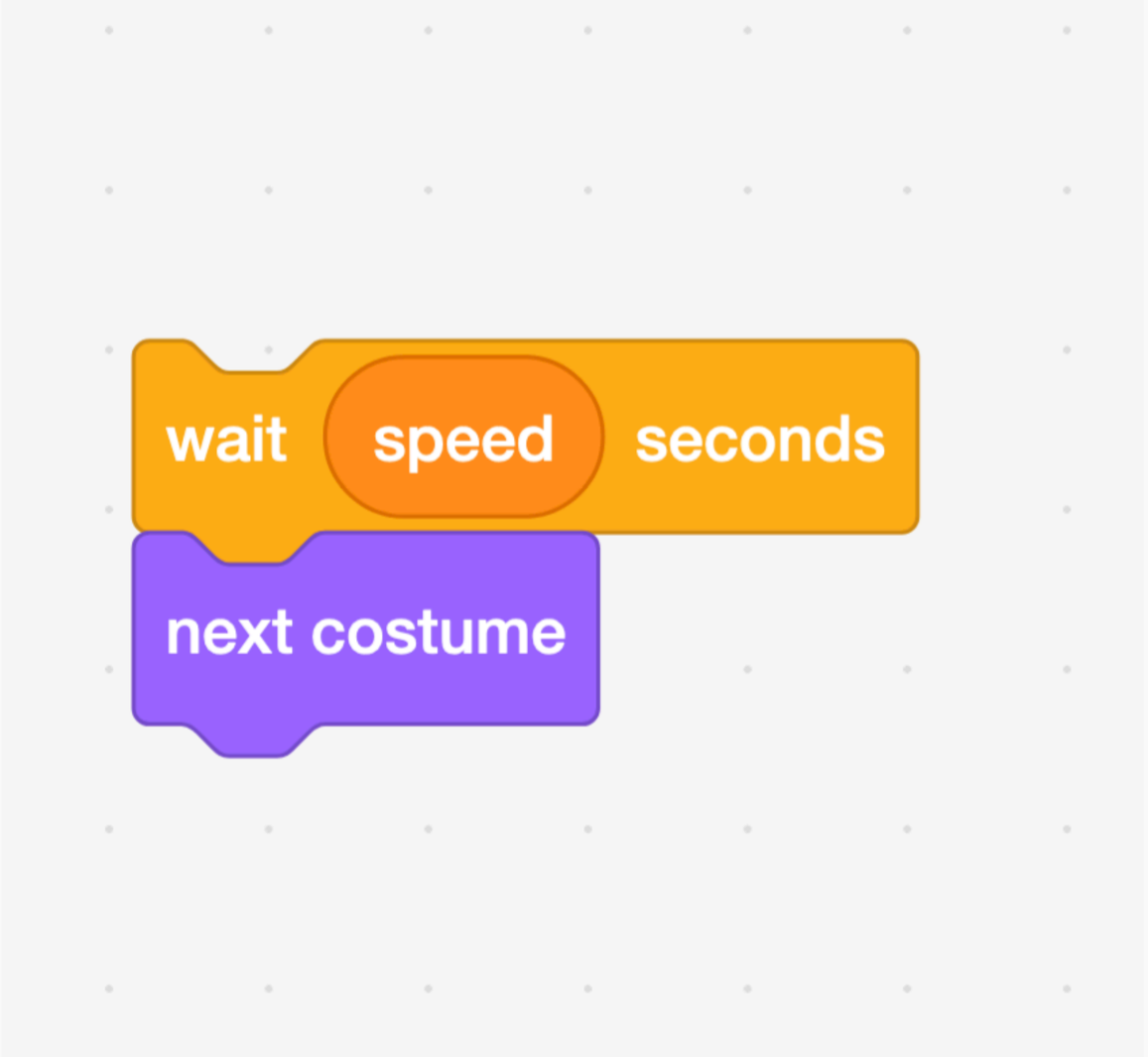
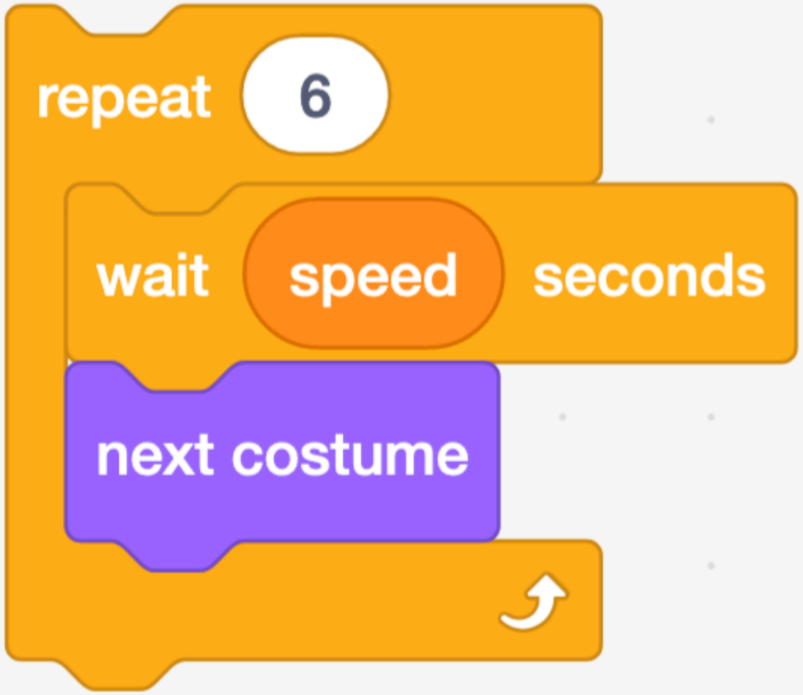


Variable

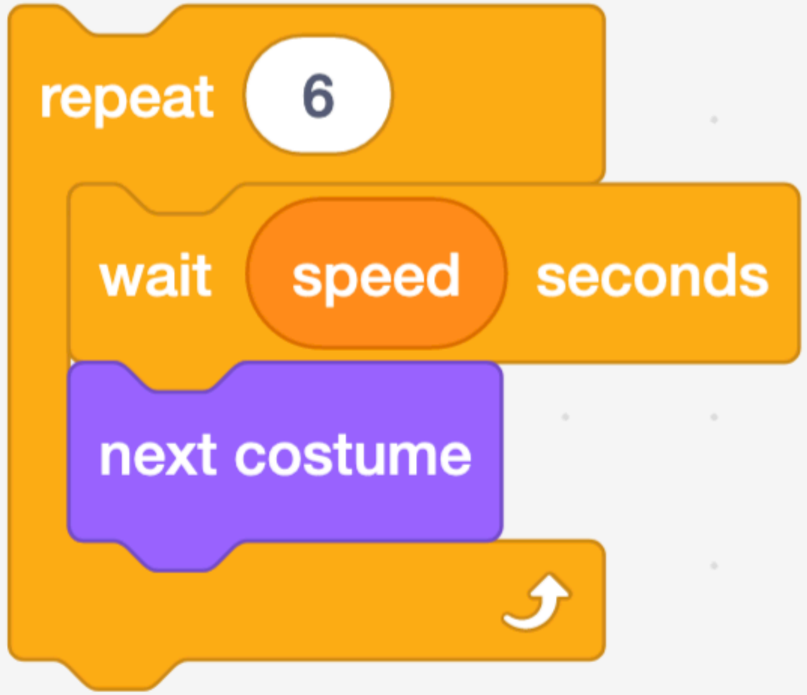
Set a value named **speed** to 0.07.

Why wait **speed** seconds? What does "next costume" mean?



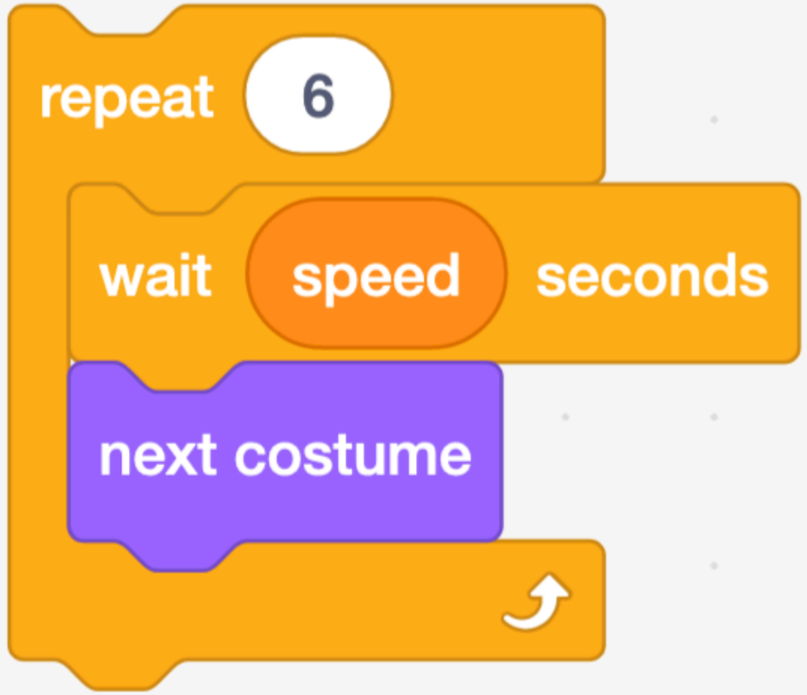

repeat
6
wait
speed
seconds
next costume

Loop



Loop

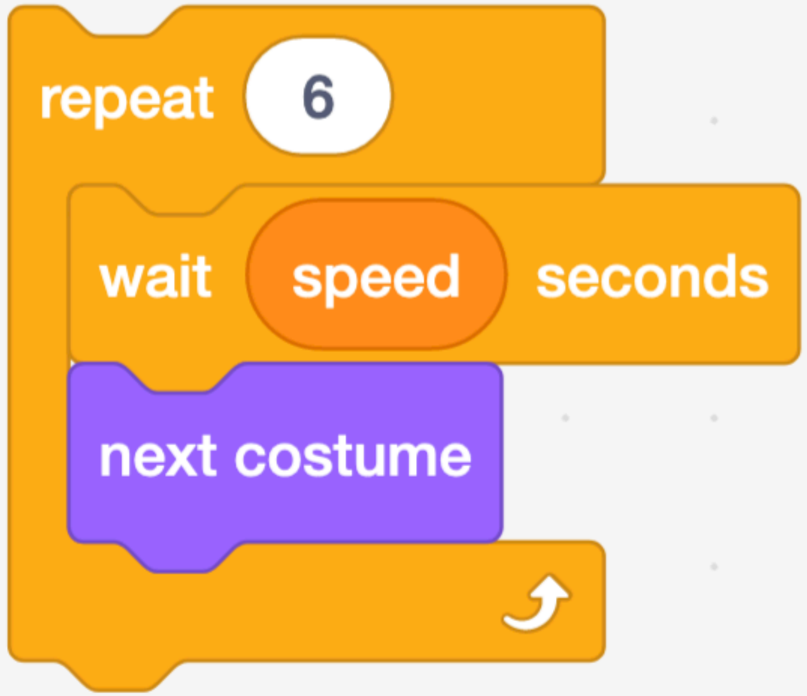
Repeat the code inside this block a certain number of times



Loop

Repeat the code inside this block a certain number of times

Why does this code need to repeat **6** times for the effect to work?



Your turn!

- Pair up with someone near you.
- Visit the **Slider_slider** sprite.
- Write comments on every few blocks of code to explain what the code is doing.
    - To write a comment, right-click on a block and choose "Add Comment."

Remixing

- "Remix" the lighthouse project
- Create at least **three** functions that abstract away some underlying complexity. For example...
    - Rotating the light
    - Adjusting the slider

Evaluation

- In CS50, we have three axes of good code.
  - Correctness
  - Design
  - Style

Evaluation

- In CS50, we have ~~three~~ four axes of good code.
  - Correctness
  - Design
  - Style
  - Ethics

Problem Set 0

Problem Set 0

- Two sprites
- Three scripts
- One conditional, one loop, one variable
- One custom block

Prompts

- Create a project where a user gets a surprise whenever they click on a sprite.
- Add a variable to your project to change how something happens.
- Add a repeat or forever block to your project.

The week ahead

- **Submit Problem Set 0** by Sunday, January 29, 11:59 PM.
- Attend **office hours**.
- Complete `https://cs50.ly/studybuddy` to be paired with a classmate if you'd like!