

# Smash Lab

---

## Link

First things first, achievement unlocked. You are now done with two Concepts homeworks and almost 3 weeks of college!

All you young'ns love your TikToks and YouTube videos, and we thought we'd give you a chance to take a break and share your favorite. Send your spiciest content our way using a hyperlink! Brownie points for whoever makes us laugh the most.

[This](#) is my favorite video on the interwebs!

## Mario

As we start living the college life, it is easy to forget that eating healthy is important.

For instance, when Mario eats a mushroom, he becomes a thicc boi. In this problem, we will simulate Mario eating eating a mushroom.

This Mario is normal.

Now Mario ate a mushroom.

This Mario is Large.

This Mario is huge.

Smash Lab

## Villager

Villager just wanted a *chill* vacation to get away from the quiet islands. Instead, he got caught up in this whole World of Light fiasco. If that wasn't bad enough, his display of pictures got all messed up!

Now Villager needs your help to fix his pictures. Figure out how to display his favorite pictures correctly by finding the right packages!



(a) Pika Pika!



(b) RUN LINK RUN

Figure 1: Villager's favorite vacation pictures!

## Kirby

Okay, a class about great *practical* ideas might be the last place you were expecting to see proofs, but unfortunately we need to talk about these mathematical marvels or monsters for a hot second.

L<sup>A</sup>T<sub>E</sub>X supports a real noice proof environment.

*Proof.* This is a proof with no justification whatsoever. □

and it looks great! Until, your mathematical proof might end with a mathematical equation.

*Proof.* This trivially follows from

$$2 + 2 = 4$$

□

and your beloved □ is not on the same line as your equation. Sigh.

Fortunately, you can fix this by using the `\qedhere` command!

*Proof.* This trivially follows from

$$2 + 2 = 4 \quad \square$$

but now the □ is ugly-ly placed in the center with your equation, but you want it at the end of the line. To get the placement right, you will need to enter math mode right. Flex your recently learned math mode skills to fix the next example!

*Proof.* This trivially follows from

$$2 + 2 = 4$$

□

## Game and Watch

Oh no! Game & Watch hit his own head with his “Judge 9” and lost his marbles :(

Now his message is all messed up! Correctly format this document and fix all the special characters to match the refsol!

Dear Donkey Kong,

You may have won the battle, but you have not won the war. I just got my mojo back and next week know that I'll drop\_the\_bomb {literally} on you. Yes, my attacks deal low percent but if I hit you enough with my Oil Panic, with 48% damage, I can definitely knock you out.

Watch out DK. ~I'm coming for you.~

# Sincerely,

# Game & Watch

Smash Lab

## Ness

As you might know, Ness is an annoying boy. When he wants to do something, he just doesn't stop.

Today, Ness wants to make a new  $\text{\LaTeX}$  macro `\pklist` that makes it easy for him to make a list of moves he'll perform on the battlefield like: Thunder  $\rightarrow$  Fire  $\rightarrow$  Fire  $\rightarrow$  Flash.

However, just like his repertoire of attacks, Ness wants the `\pklist` command to be as flexible as possible. Specifically, he wants that the command should be able to take in an arbitrary number of arguments and insert arrows between them.

`\pklist{1}` : 1

`\pklist{1}{2}` : 1  $\rightarrow$  2

`\pklist{1}{2}{3}` : 1  $\rightarrow$  2  $\rightarrow$  3

`\pklist{1}{2}{3}{4}` : 1  $\rightarrow$  2  $\rightarrow$  3  $\rightarrow$  4

Hopefully you get the point! Unfortunately,  $\text{\LaTeX}$  doesn't support these kinds of demands natively so Ness has come up with a hacky workaround. But something is wrong!

Can you debug Ness's command so that the hardcoded render and the function call render look the same?

### Hardcoded

Fire  $\rightarrow$  Thunder  $\rightarrow$  Flash  $\rightarrow$  Magnet  $\rightarrow$  Final Smash.

### Function Call

Fire  $\rightarrow$  Thunder  $\rightarrow$  Flash  $\rightarrow$  Magnet  $\rightarrow$  Final Smash