Coding Fundamentals ASPIRE

(8/11 - 12/12)

Helix Charter High School
Isabelle Viraldo

Week 15

Welcome!

- Mondays: Discussion + Activity
- Fridays: Review + Programming Exercise

What do you want to learn?

What do you care about?

What do you want to accomplish?

feedback!

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Topics I hope to cover:

- GitHub (How to use and let's set one up!)
- AI (Machine Learning vs Generative AI vs Image Detection, let's break it down (and make one of our own))
- How to code! (Some practical skills, and also best practices)
- Binary (What is it? Why is it important? Who cares?)
- Robotics (What do you need to get a robot working?)
- How does your computer work? (What do computers do when you're not looking?
- What do you want to learn?

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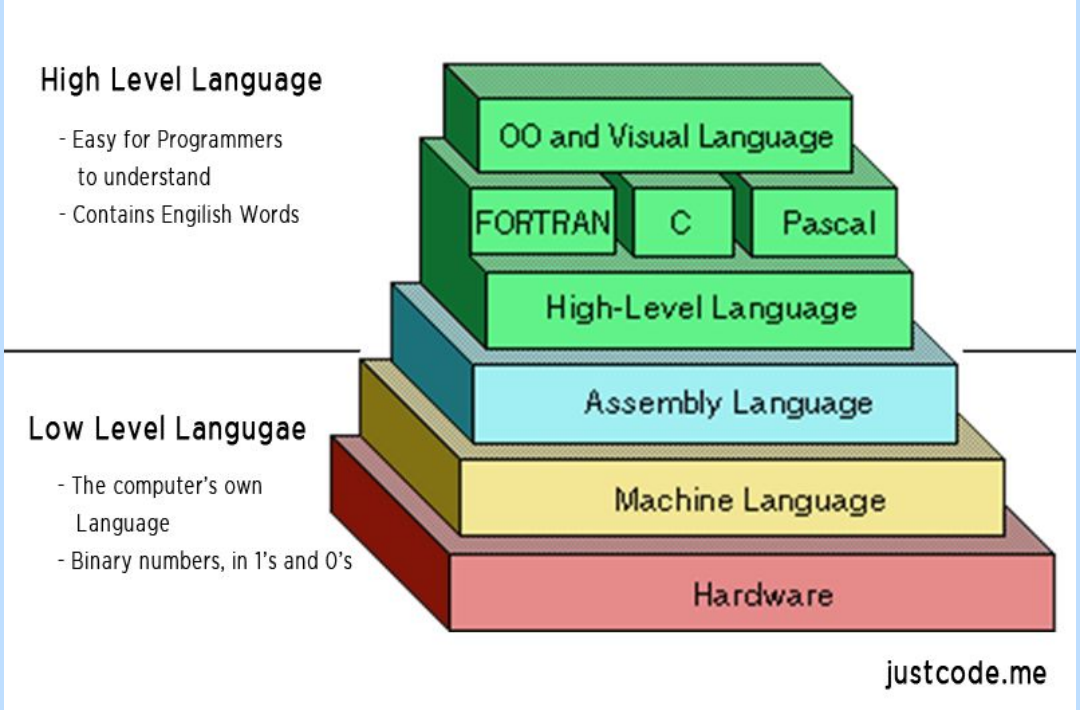
High-Level Language
- Python, C++, FORTRAN

Assembly Languages

Machine Language
- Binary

Turing Completeness



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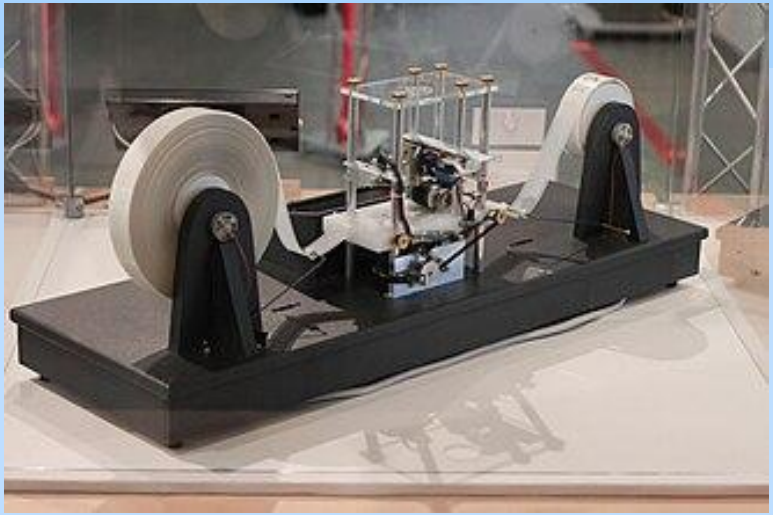
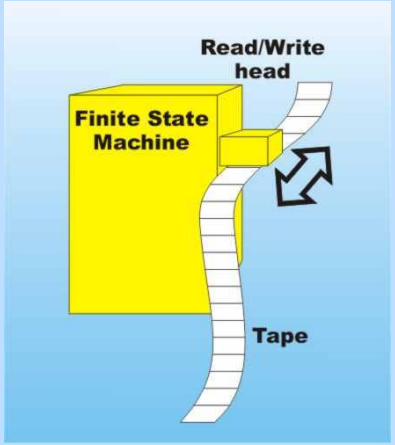
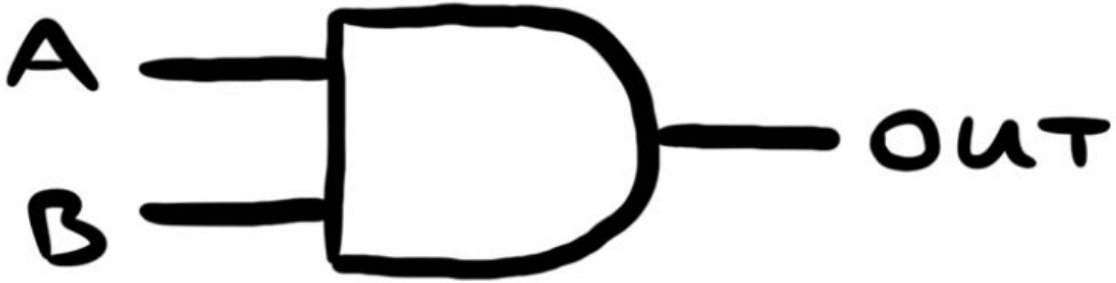
Turing completeness

Turing Machine
- Tape
- Read/Write head
- Finite state machine





AND GATE



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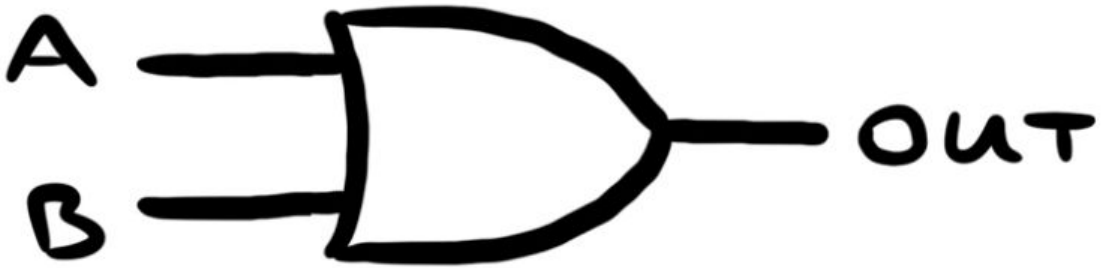
OR GATE



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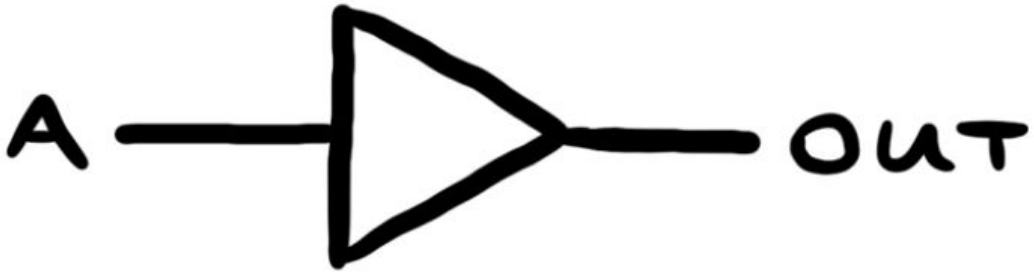
NOT GATE



A	OUT
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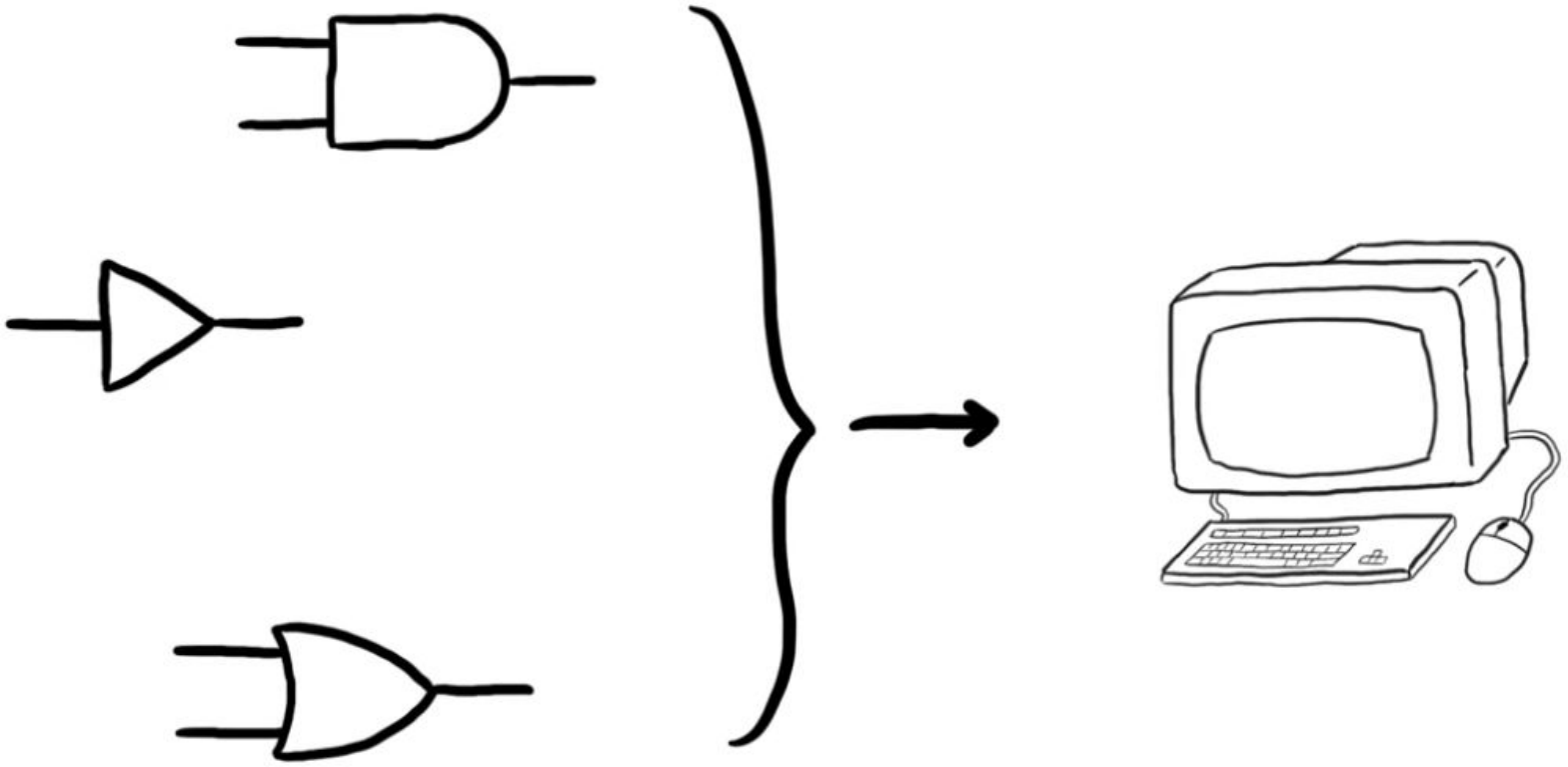
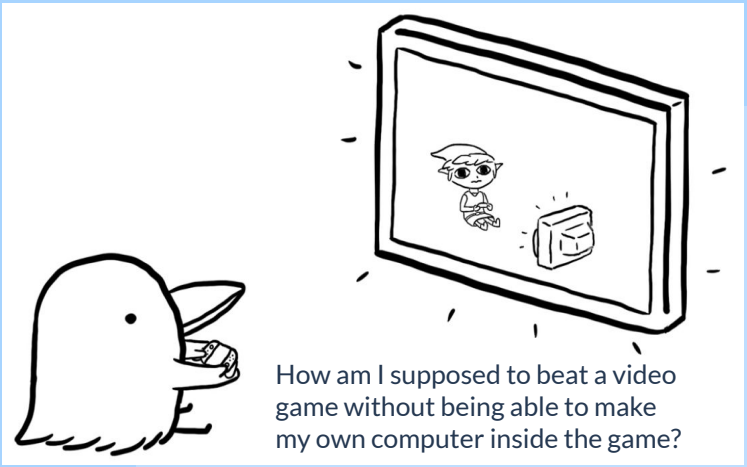
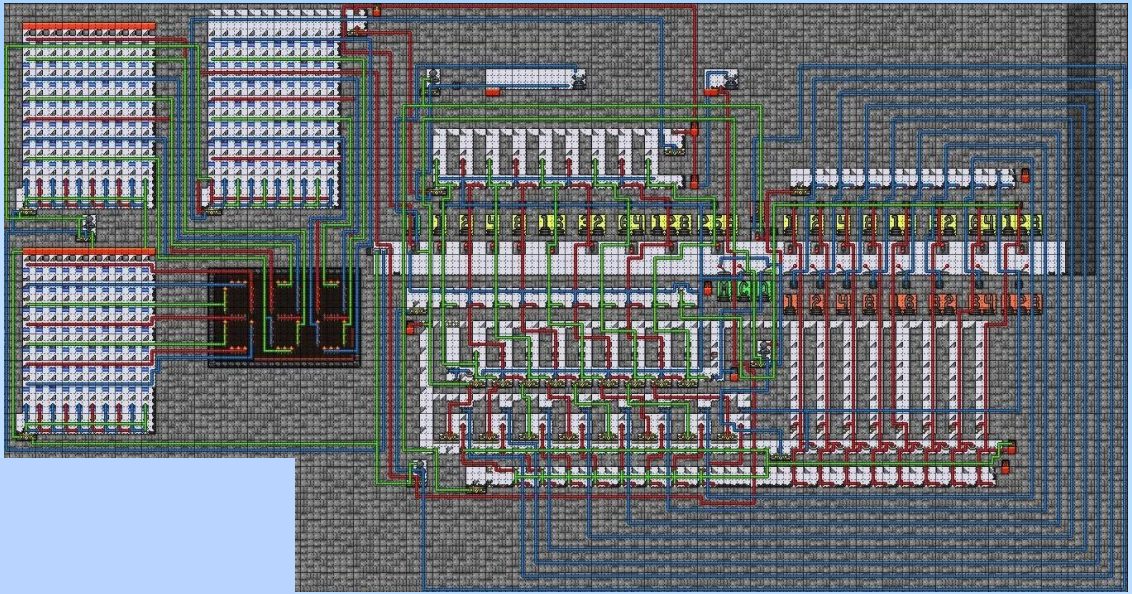
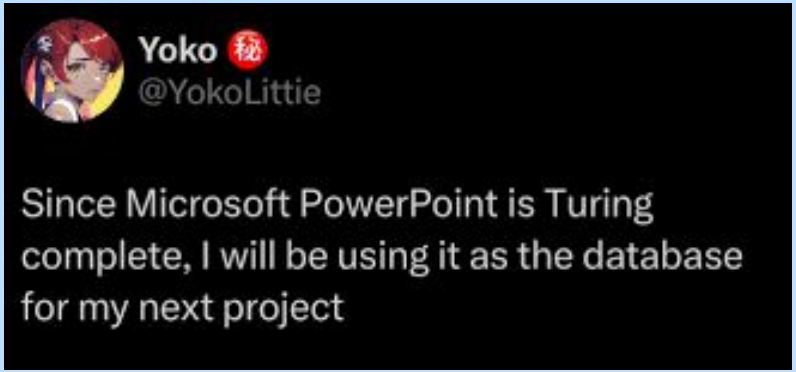



How am I supposed to beat a video game without being able to make my own computer inside the game?




Yoko 秘
@YokoLittie
Since Microsoft PowerPoint is Turing complete, I will be using it as the database for my next project

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Coding activity! Get out your Chromebooks!

Everyone look up:

python online compiler

Or

Go to: https://tinyurl.com/yc4w9mdh

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