What is something that has been coded by someone else?

How much time do you think it takes to create code?
ABOUT COMPUTER SCIENCE & PROGRAMMING

**Computer Science:**

- The study of computers and computational systems.
- Combines theory, algorithms, data structures, artificial intelligence, machine learning, and more.
- Involves problem-solving, abstraction, and designing efficient solutions.
ABOUT COMPUTER SCIENCE & PROGRAMMING

Programming:

- Process of writing instructions for computers to execute (code).
- Languages include Python, Java, C++, JavaScript, and many others.
- Involves algorithmic thinking, logical reasoning, and attention to detail.
Where did it all start?

Mid 1800s

1969

1952

1985
What is CYBERSECURITY?

Protecting systems, networks, and data from digital threats and attacks
COMPONENTS

Assets: (wired or wireless) connected to a system

Defenses: (antivirus or encryption) protect assets from attackers or hackers

Events: failure of critical computer or network equipment

Attacks: (malware or phishing) creates outside access to your system or accounts
Test your cybersecurity smarts!

CODING LANGUAGES

HOW IS ALL OF THIS DONE?
What is PYTHON?

Developed by Guido van Rossum in 1991 to be an object-oriented, high-level programming language.

Used for:

➔ Developing websites and software
➔ Task automation
➔ Data analysis
➔ Data visualization
Python in everyday life
http://bit.ly/PythonSandbox
AMAZON & AI

How does it find multiple occurrences?
```python
# Create a string 's' containing a sentence.
s = "The quick brown fox jumps over the lazy dog."

# Print a message indicating the original string.
print("Original string:")

# Print the original string 's'.
print(s)

# Print a message indicating the number of occurrences of 's' in the string.
print("Number of occurrences of 's' in the said string:")

# Print the count of occurrences of the character 's' in the string 's'.
print(s.count("s"))
```
AMAZON MACHINE LEARNING

- Consistent order patterns
- Consistent delivery patterns
- Consistent customer zip codes
How to correct this error?

AMAZON MACHINE LEARNING
Debugging

The process of finding and fixing errors or bugs in the source code of any software.
LET’S COMBINE IT ALL TOGETHER

Python Coding Skills

Web Development

Occurrences

Debugging
CODE A COMPANY
LOGO

Now let’s switch the roles – YOU are the computer!

THANKS!

Do you have any questions?
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