Mission 1: Grace Hopper & Intro to Python

☐ **Goal:** Discover how Grace Hopper changed programming forever and try your first lines of Python code!

☐☐ Who Was Grace Hopper?

Grace Hopper was a Navy Rear Admiral and a trailblazing computer scientist. She invented the **first compiler**—a tool that lets humans write in easy-to-read code instead of just 1s and 0s! She also helped develop the COBOL language used in business and government for decades.

Fun Fact: She was known as "Amazing Grace" and even had a warship named after her.

> "The most dangerous phrase in the language is: 'We've always done it this way.'" – Grace Hopper

☐ Read Her Bio (Women's History.org)

☐ Watch: The Queen of Code (YouTube)

☐ Learn to Code: Python Basics

Python is one of the easiest and most popular coding languages. You can use it to make games, apps, or analyze data.

Here's your first program:

```python
print("Hello, world!")
```

☐ This prints text to your screen. Try it out here: Run Code on Trinket

Now try adding your own message:

```python
print("My name is _____")
```

☐ Reflect:

- What would computers be like if we had to use only 1s and 0s?
- Why is it important to make coding easier and more accessible?

☐ Try It Yourself Challenge:

Write a mini conversation between two people using `print()`.

```python
print("Alice: Hello!")
print("Bob: Hi there!")
print("Alice: Do you like coding?")
print("Bob: I love it!")
```

Try it in a code editor:

- [Trinket](#)

☐ Bonus Mission:

Make a Grace Hopper "quote generator"! Create a program that prints one of her quotes each time it runs. Example:

```python
import random

quotes = [
    "The most dangerous phrase is: 'We've always done it this way.'",
    "A ship in port is safe, but that's not what ships are built for.",
    "It's easier to ask forgiveness than it is to get permission."
]

print(random.choice(quotes))
```

Try changing or adding your own quotes!

☐ **You've completed Mission 1!** Check the box on your worksheet and move on to the next pioneer!

Trinket Guide

Teacher instructions when visiting Trinket:

No registration necessary.

1. Delete existing code.

2. Copy and paste desired code

3. Hit play button