QND Computer Science Day 10

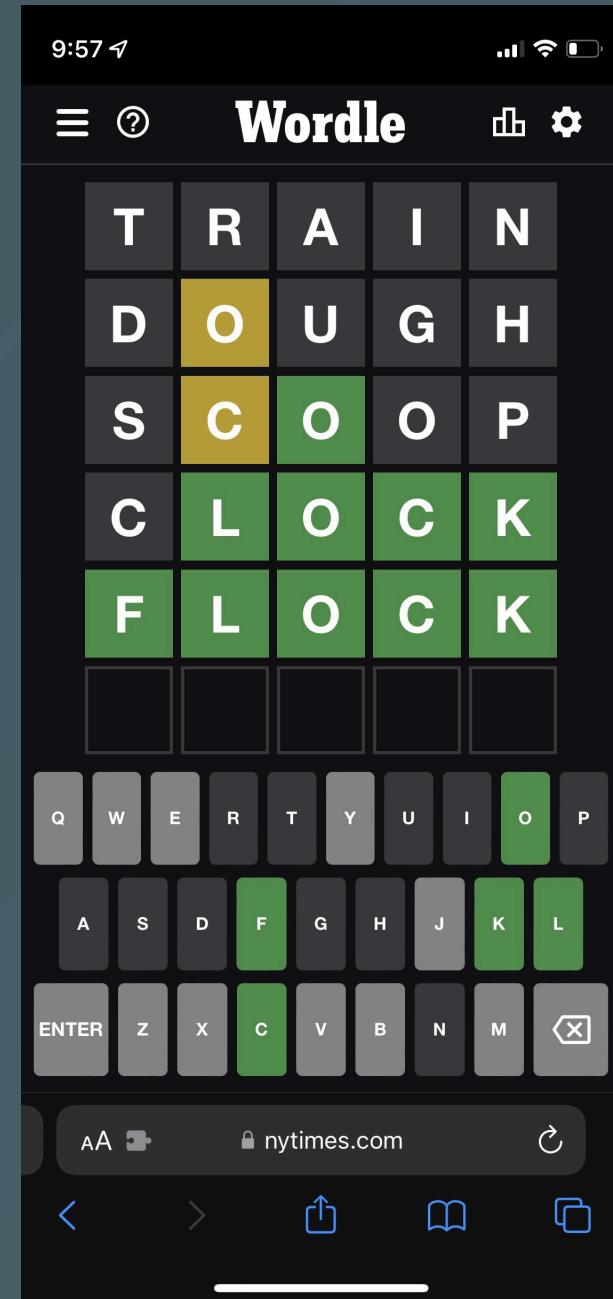Mr. Schmidt

Recap

- Guess My Number

Stage 4

- Play Again?
- Track best guess count across plays

What's Next?

Wordle

- Very fun game
- Very simple

What does this output?

```
let ice_cream_flavors = ["Chocolate", "Vanilla", "Cookies and Cream", "Strawberry"]

for flavor in ice_cream_flavors {
    console.write("The flavor is \(flavor)")
}
```

What does this output?

```
let ice_cream_flavors = ["Vanilla", "Chocolate", "Cookies and Cream", "Strawberry"]

let my_favorite = ice_cream_flavors[2]
console.write("My favorite flavor is \(my_favorite)")
```

Why do Arrays start at zero?

- It's a single block of memory
  - The first element is at the first address
- It's what lots of other languages do

What happens when we change 2 to 4?

```
let ice_cream_flavors = ["Vanilla", "Chocolate", "Cookies and Cream", "Strawberry"]
                        // 0          1                2                    3

let my_favorite = ice_cream_flavors[2]
console.write("My favorite flavor is \(my_favorite)")
```

Array Contains

- How to check if a Array contains an item?

```
if favorite_ice_cream_flavors.contains("Chocolate") {
    console.write("Yum!")
}
```

Wordle

- Multiple stages, like Guess My Number

Stage 1: Grade a Guess

- Turn a string into an Array
- Get a guess from the user

Stage 2: Looping and Validation

- Put the guess part in a loop

- Check if the guess is the right length
  - Use `continue`

- Check if the guess is correct!

Stage 3: Guess Count Limit

- Track the number of guesses

- If guesses >= 6, tell the user they lost

- Random word from a word bank!

Stage 4: Miscellania

- Use ColoredString instead of emoji
- Always compare in the same letter casing

Stage 5: Play again?

- Wrap it all in a loop

- When the inner loop exits, ask if they want to play again. Otherwise, break