QND Computer Science Day 10

Mark Schmidt

Agenda

- Recap
- Loops
- varvariables
- Booleans (you've been using them already)
- Making a game!

Recap

• Calculator

var

```
var count = 0
```

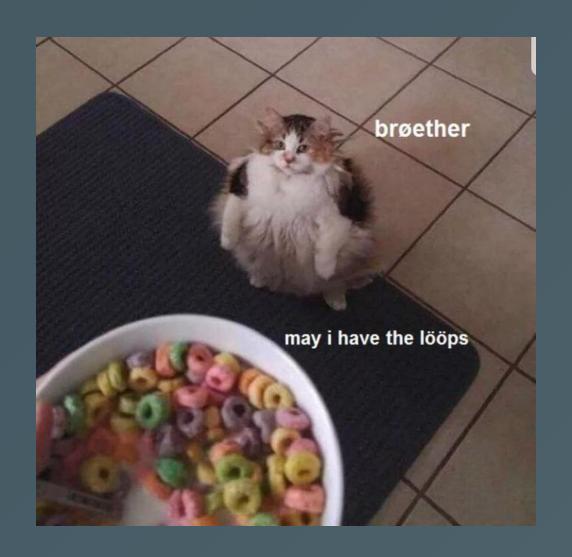
• Read as "set variable count to 0"

```
count = count + 1
```

- Read as "set count to count + 1"
- let cannot be changed
- var can

Loops

- while loops
- for loops



Repeating code

```
var count = 1
while count < 5 {
    print("Hello, World! Count = \((count)\)")
    count = count + 1
}</pre>
```

Here be dragons!

```
var count = 1
while count > 0 {
    print("Hello, World! Count = \((count)\)")
    count = count + 1
}
```

Infinite Loops

- "Why isn't my program running?"
- This program will never end
- To exit early, use STOP button
- Beware of overflowing resources!

when you forget to write an exit condition for your while loop



Loops!

```
var running = true
while running {
    print("Enter a number")
    let firstNumber = Int(readLine()!)!
    print("Enter another number")
    let secondNumber = Int(readLine()!)!
    print("Enter a command")
    if command == "q" || command == "quit" {
        running = false
    } else if command == "add" {
```

Today's Task

• Guess My Number Game