

QND Computer Science Day 6

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Recap

- Calculator
- Nested Ifs

What does this do?

```
var count = 0
while count < 3 {
    print("Hello, World, count = \(count)")
    count = count + 1
}
```

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



Here be dragons!

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

Infinite Loops

- This program will never end
- To exit early, use CTRL + C shortcut or 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

- Add a `while` loop to the calculator
- Finish the calculator!