

# QND Computer Science Day 5

Mark Schmidt

# Recap

- Booleans
- `if`
- Calculator

# Combining Booleans

```
if health < 0 || time_remaining < 0 {  
    print("Game Over")  
}
```

```
//...
```

```
if op == "+" || op == "add" {  
    let sum = a + b  
    print("The sum is " + String(sum))  
}
```

# And

- Use &&

```
if username == "admin" && password == "password" {  
    print("Welcome, admin!")  
}
```

...

```
if day == "Monday" and time == "9:00" {  
    print("It's time for class!")  
}
```

# String Interpolation

- A fancy name for a simple thing
- Write `"Sum is " + String(sum)` is annoying
- Programmers are lazy!
- Insert code inside a string

```
let sum = a + b
print("Sum is " + String(sum))
// Same as
print("Sum is \$(sum)")
// same as
print("Sum is \$(a + b)")
```

# Calculator Improvements

- Invalid operators
  - use `else`
- Accept "+" or "add"
  - use `||`
- What happens if we divide by zero?
  - Guard using `&&` at the top
- Exponentiation
  - `**`
- Use String Interpolation `\(sum)`