

# QND Computer Science Day 9

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# Recap

- Integers
- Floats
- Calculator Project

**if** / **else if** / **else**

- Ask the user for an operation
- Add
- Subtract
- Multiply
- Divide
- Use **else** to handle error!

# Improvements!

- String interpolation
- `if let`

# 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)")
```

# if let

- Handle errors!
- Replaces **!**

```
if let firstNumber = Int(firstNumberString) {  
    // Use firstNumber inside these braces  
}
```

# Calculator Improvements

- Exponentiation
  - `**`
- Accept "+" or "add"
  - use `||`
- What happens if we divide by zero?
  - use nested if/else
- Use String Interpolation `"The sum is \ (sum) "`
- Invalid numbers
  - Use `if let`