

QND Computer Science Day 9

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Recap

- Integers
- Floats
- Calculator Project

Combining Ints and Strings

- Does not work

```
let sum = 5 + 10
`print("The sum is " + sum)`
```

- Have to convert Int -> String

```
let sum = 5 + 10
`print("The sum is " + String(sum))`
```

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

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

Improvements!

- String interpolation
- Nested ifs (again)

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)")
```

Nested Ifs Again

```
if operation == "divide" {  
  if secondNumber == 0 {  
    print("Can't divide by zero!")  
  } else {  
    let quotient = firstNumber / secondNumber  
    print("Quotient is \$(quotient)")  
  }  
}
```

Calculator Improvements

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