

# QND Computer Science Day 3

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# Recap

- Strings
- Variables
- Concatenation
- `print()`
- `readLine()!`
- Chat

# Today

- How can we make programs more interactive?

# if statements

- Execute different code based on a condition

```
print("What is the best ice cream flavor?")
let answer = readLine()!
if answer == "Cookies and cream" {
    print("Correct, oreos in ice cream is the best")
} else {
    print("Wrong, " + answer + " is not the best")
}
```

## else if

- What if there are multiple branches?
- You can have as many `else if`s as you want!

```
print("What is the best ice cream flavor?")
let answer = readLine()!
if answer == "Cookies and cream" {
    print("Correct, oreos in ice cream is the best")
} else if answer == "Chocolate" {
    print("Chocolate is good, but it's not quite the best")
} else {
    print("Wrong, " + answer + " is not the best")
}
```

# Nested Ifs

- You can put if statements inside of other if statements

```
...  
if answer == "Cookies and cream" {  
    print("Correct, oreos in ice cream is the best")  
    print("Waffle cones or sugar cones?")  
    let cones = readLine()!  
    if cones == "Waffle cones" {  
        print("Come on, who doesn't love a fresh waffle cone?")  
    } else {  
        print("WRONG")  
    }  
}  
...  
...
```

# Zork / Adventure

- Text based games
- Before computer graphics
- <https://www.colossalcave3d.com/play-the-original-text-adventure/>

```
.run adven
```

```
WELCOME TO ADVENTURE!!  WOULD YOU LIKE INSTRUCTIONS?
```

```
yes
```

```
SOMEWHERE NEARBY IS COLOSSAL CAVE, WHERE OTHERS HAVE FOUND FORTUNES IN  
TREASURE AND GOLD, THOUGH IT IS RUMORED THAT SOME WHO ENTER ARE NEVER  
SEEN AGAIN.  MAGIC IS SAID TO WORK IN THE CAVE.  I WILL BE YOUR EYES  
AND HANDS.  DIRECT ME WITH COMMANDS OF 1 OR 2 WORDS.  I SHOULD WARN  
YOU THAT I LOOK AT ONLY THE FIRST FIVE LETTERS OF EACH WORD, SO YOU'LL  
HAVE TO ENTER "NORTHEAST" AS "NE" TO DISTINGUISH IT FROM "NORTH".  
(SHOULD YOU GET STUCK, TYPE "HELP" FOR SOME GENERAL HINTS.  FOR INFOR-  
MATION ON HOW TO END YOUR ADVENTURE, ETC., TYPE "INFO".)
```

```
THIS PROGRAM WAS ORIGINALLY DEVELOPED BY WILLIE CROWTHER.  MOST OF THE  
FEATURES OF THE CURRENT PROGRAM WERE ADDED BY DON WOODS (DON @ SU-AI).  
CONTACT DON IF YOU HAVE ANY QUESTIONS, COMMENTS, ETC.
```

```
YOU ARE STANDING AT THE END OF A ROAD BEFORE A SMALL BRICK BUILDING.  
AROUND YOU IS A FOREST.  A SMALL STREAM FLOWS OUT OF THE BUILDING AND  
DOWN A GULLY.
```

```
east
```

```
YOU ARE INSIDE A BUILDING, A WELL HOUSE FOR A LARGE SPRING.
```

```
THERE ARE SOME KEYS ON THE GROUND HERE.
```

```
THERE IS A SHINY BRASS LAMP NEARBY.
```

```
THERE IS FOOD HERE.
```

# Make Your Own

- Give the user some story and a simple choice
- Use nested `if` statements to print what happens next
- Be creative!
  - You can do a quiz (or extend your quiz)
- *keep it appropriate*
- <https://replit.com/@mrschmidt/Adventure#main.swift>