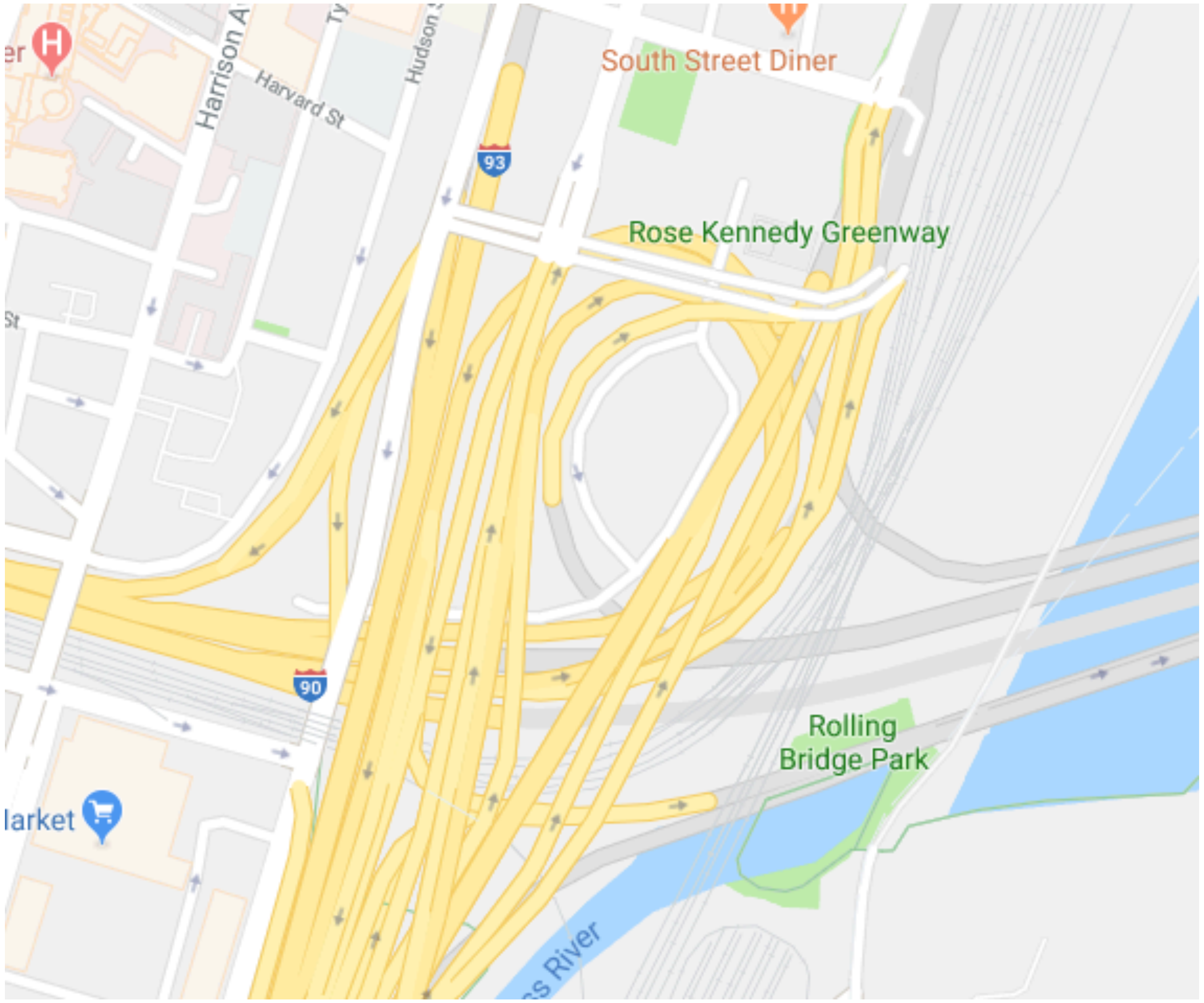

CSCI 141

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Nested and Chained Conditional Statements

Goals

- Understand how conditional statements can be nested to make decisions among more than two possibilities.
- Know how to use `if/elif/else` statements.

Nested Conditionals

If/else lets you choose between two options.

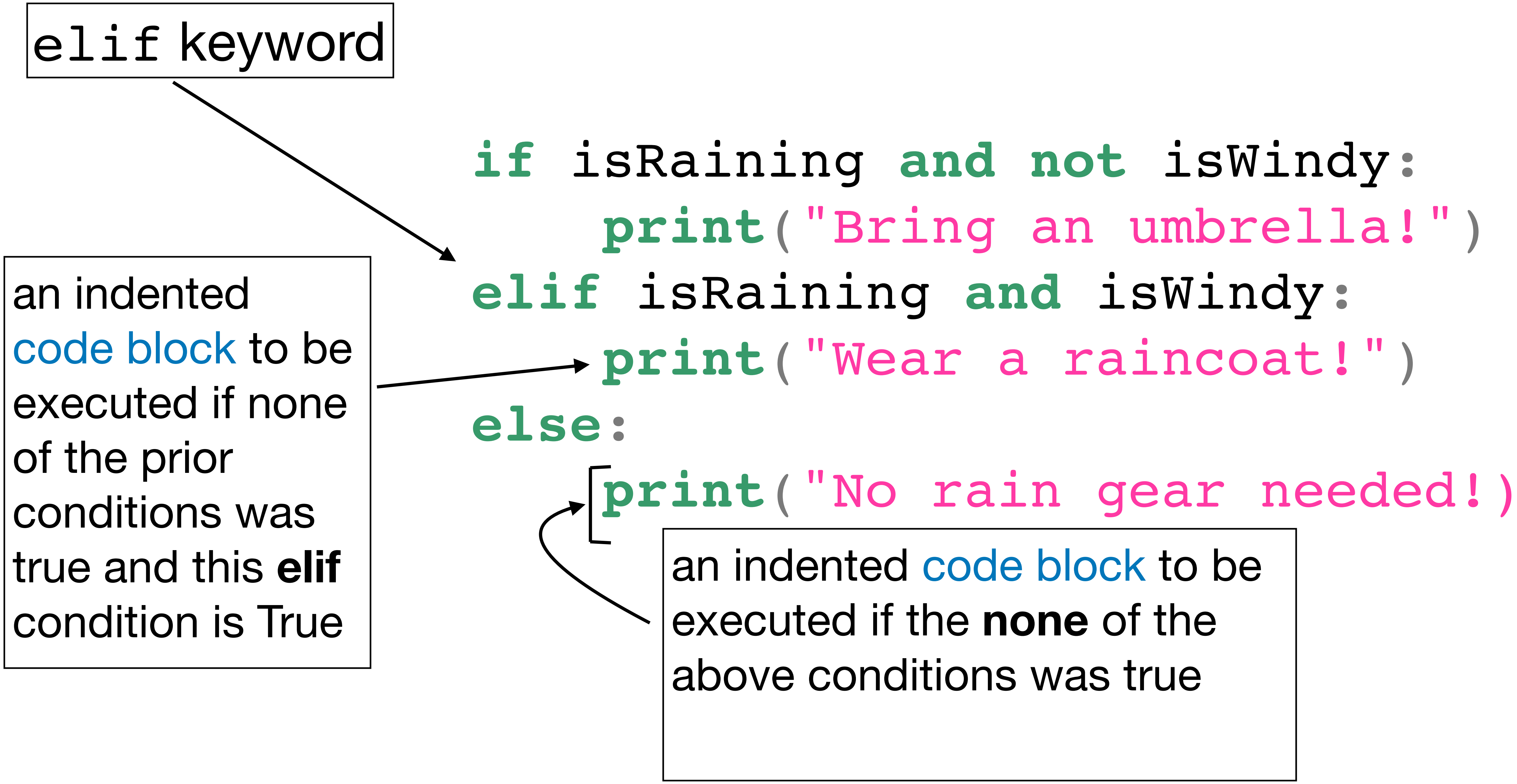
What if there are more than two possibilities?

```
# assume x and y are numbers
if x < y:
    print("x is less than y")
else:
    if x > y:
        print("x is greater than y")
    else:
        print("x and y must be equal")
```

Note: the conditions still have to be boolean expressions (i.e., they evaluate to True or False)

the inner if/else statement **is** the indented code block for the else clause of the outer if/else statement.

Chained Conditionals: Syntax



elif keyword

```
if isRaining and not isWindy:
    print("Bring an umbrella!")
elif isRaining and isWindy:
    print("Wear a raincoat!")
else:
    print("No rain gear needed!)
```

an indented code block to be executed if none of the prior conditions was true and this **elif** condition is True

an indented code block to be executed if the **none** of the above conditions was true

(an else clause is optional)

Demo

Task: Write a program to ask the user for their 141 section number and print out when their lab section happens.

```
>>> %Run section_times.py
  Enter your CSCI 141 section number: 20770
  Your lab is on Tuesday from 10 - 12.
>>>
```

Chained Conditionals: Demo

- sections.py: with nested if/else statements
- sections_elif.py: with if/elif/else
- sections_refactored.py: refactored to set variables then call print once