Week 3 - Friday

COMP 1800

Last time

- What did we talk about last time?
- Strings
  - Concatenation (**+**)
  - Length (**`len()`**)
  - Indexing (**`[]`**)
  - Slicing (**`[:]`**)
  - Checking for a substring (**`in`**)

Questions?

Input

We've got output

- To output stuff, we just use **`print()`**

```
print('Flip mode is the squad!')
print(35)
```

- What about input?
- Input isn't much harder! It uses a function called **`input()`**

Using `input()`

- To read input from the keyboard, you call the **`input()`** function, putting the message you want the user to respond to

```
name = input('What is your name? ')
```

- This code, for example, will print **`What is your name?`** and allow the user to type a response
- Once the user types the response, he or she should hit enter
- The line typed in by the user will be stored into whatever variable you use on the right of the equal sign, in this case **`name`**

Converting input

- Reading the input is easy, but it only gives back a string, that is, text information
  - If the user enters **42**, you don't get the number 42, you get the string **'42'**
- If you want to convert the text to an integer, you use the **int()** function

```
years = int(input('How old are you? '))
```

- If you want to convert the text to a floating-point value, you use the **float()** function

```
rate = float(input('What is the interest rate? '))
```

Type conversion

- The **`str()`** conversion function turns other types into text
- These conversion functions can be used to convert different types into each other, not only during input

```
x = 3.1459
n = int(x) # n now contains 3
text = '6.02'
number = float(text)
moreText = str(number) # back to string
word = 'goats'
value = int(word) # causes error
```

Putting it all together

```
number = int(input('What number do you want? '))
result = number * number
print('Your number squared is', result)
```

Work Time for Assignments

Upcoming

Next time…

- Character functions
- Encryption

Reminders

- Read Sections 3.2.7 and 3.4 of the textbook
- Finish Assignment 2
  - Due tonight by midnight
- Start on Assignment 3