Day 1

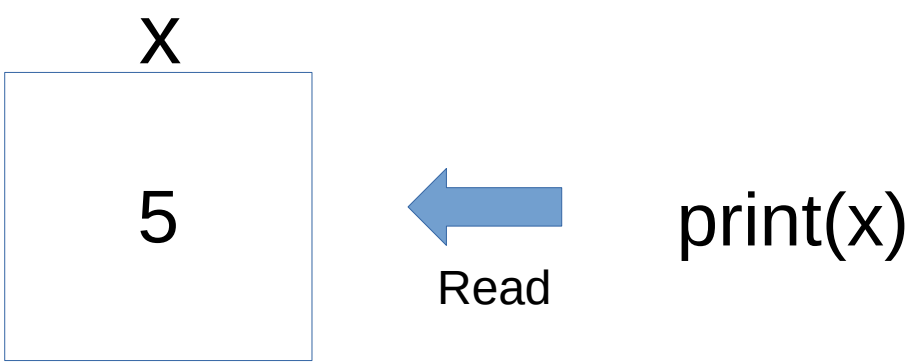
Variables, Strings, Simple Python

Variables are just placeholders

x = 5

x ← 5

Assignment



Name your variables properly

- Lowercase
- Descriptive
- Underscore_between_words
- No conflict with inbuilt names

Numbers and Strings

“Hello world!”

“ or ‘  Tells Python it’s text

Text works very different from numbers!

What’s the difference between 1 and 1.0?

Numbers!

- Integral type
- Float type
- Complex numbers

+ , - , * , / , // , % , **

Pizza time!

- Build a Pizza calculator script
- Use variables for all numbers
- For a Pizza of Radius *z* and height *a:*
  $V = Pi * z * z * a$
- Pi = 22/7 (plenty close) or 3.14 (close enough)

Whitespace

- Use empty lines to section your script
- Avoid empty space where it doesn’t belong
- Especially avoid it at the beginning of lines (more later)

Comments

- One-line comments are started with #, end with line
- Multi-line commands start and end with “””
- Later you explain yourself the script
- Can also section things

Add some nice toppings

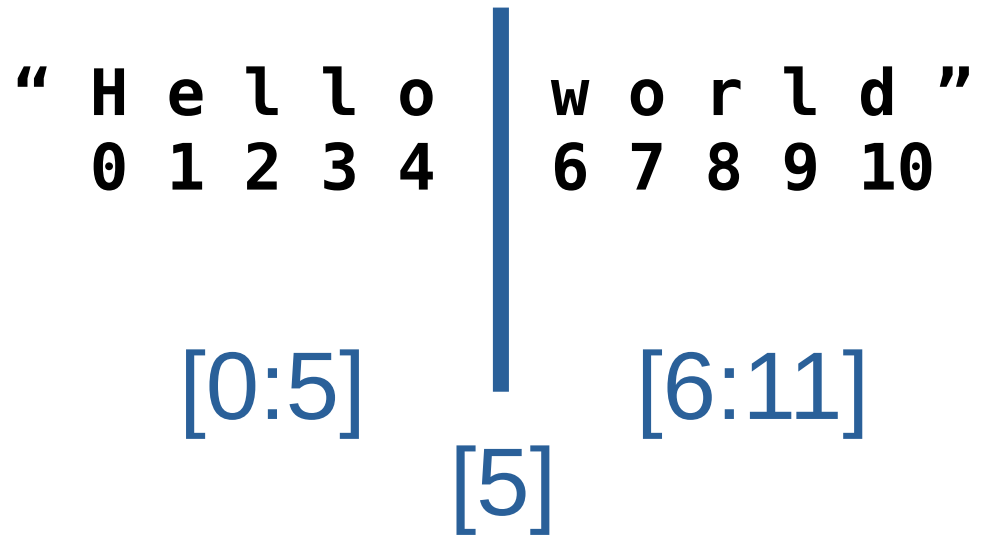
- Properly comment and section your Pizza script

Strings!

```
>>> 'Python goes b' + 'r'*10
'Python goes brrrrrrrrrr'
```


https://www.reddit.com/r/ProgrammerHumor/comments/igvny1/python_goes_brrrr/

String slicing



Functions and methods

do(x) : *do* is a function

x.do() : *do* is a method

You'll learn the difference later.

For now just remember which to use.

For your string needs

.strip()	Remove whitespace at ends
.replace(old, new)	Replaces “old” with “new”
.capitalize()	Like so
.lower()	like so
.title()	Like So
.upper()	LIKE SO

and MANY MORE!!

World: “Hello you!”

- Write a nice greeter program to say hello to you.
- Use the input() and print() functions
  along with f-Strings.

What’s my name?

- Slice and dice your name to make some funny creations.
- Be creative! ;)

Exercises

1. Replacing within a string:
   - Create string with words separated by commas (,)
   - Replace the commas with spaces
   - Print out resulting string

2. Write a greeter program:
   - Says hello, then asks for your name
   - User inputs the name
   - Prints a greeting with the name