# Day 1

## Variables, Strings, Simple Python

# Variables are just placeholders

x = 5

x ← 5

Assignment

x
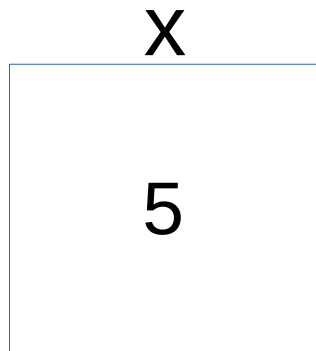
5 ← print(x)

Read

# **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?

# 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
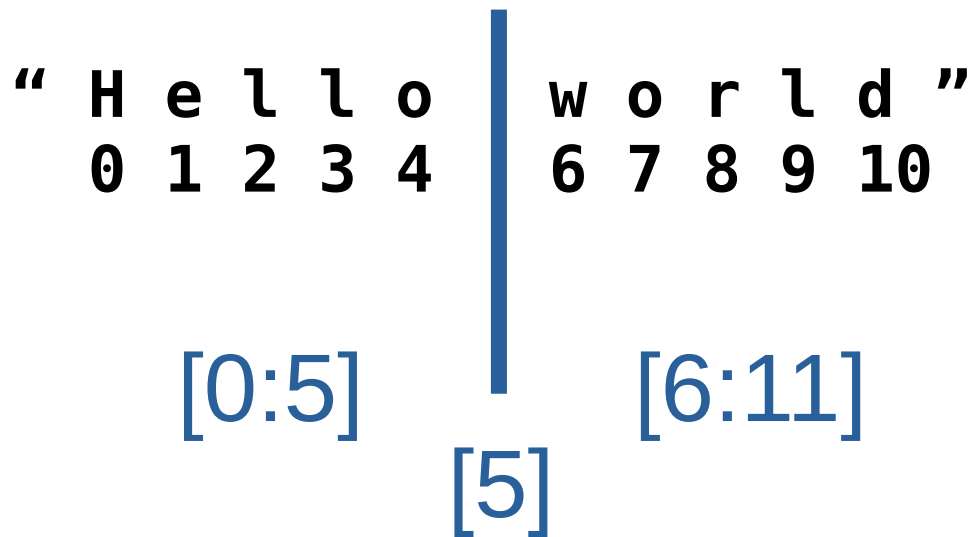
- Properly comment and section your Pizza script

# Strings!

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

# String slicing

```
" H e l l o   w o r l d "
  0 1 2 3 4   6 7 8 9 10
```

[0:5]  [6:11]

[5]

# 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