



# Announcements

- **Reading Assignment 1 due tonight at 11:59pm!**
  - Reading and annotating the syllabus on Hypothesis (through Canvas)
- **Lesson 1 Canvas Quiz due tonight at 11:59pm!**
  - Need to score 100% to count as completion (*unlimited attempts*)
- Section starts tomorrow!
  - **First section assignment is due Friday at 10:30am (before class)**
- Office Hours are available this week
  - Check the [course calendar](#)
- Make sure you have access to all the course materials
  - Ed, Gradescope, Canvas
  - **If you just enrolled:** wait about 24 hours for the rosters to update
- If you are having trouble running Python files, please come to office hours.

# Questions during Class

- Feel free to raise your hand at any point during class if you have a question.
  - During group work time, TAs and Adrian will be walking around answering questions individually.
  - You can also post questions on the Slido
- If we miss your question
  - Ask it after class
  - Make an Ed post
  - Add it to the Slido so a TA or Adrian can reply with an answer
- After every lecture, Adrian will post a **Slido Recap** on the course Ed board. This will contain questions and answers to all of the Slido questions for the day



# Website/(Quick) Gradescope Tour!

- Website is now live!
- <https://courses.cs.washington.edu/courses/cse163/26sp/>
  - Bookmark this page!
  - Shorthand: [cs.uw.edu/163](https://cs.uw.edu/163)
- If you are every unsure of where to find the assignments, check on the course website!
- Things to look out for
  - **Course Calendar** (home page)
  - **Lessons** (in the left-hand sidebar)
  - **Office Hours** (in the left-hand sidebar)
  - **Course Tools** (in the left-hand sidebar)
    - Ed, Canvas, [Gradescope](#), JupyterHub, Anonymous Feedback

# Pre-Class/Lesson Workflow

- Each lesson has a table of contents
- Download files from “Setting up”
- **Before class:** Read as much as you can up to the “Pause and Think” section
- **During class:** Review the reading and work on the “In-Class” section
- **After class:** Complete the “Canvas Quiz”

- 1) Objectives
- 2) Setting up
- 3) Python Basics
  - 3.1) Printing
  - 3.2) Main-method pattern
  - 3.3) Variables
  - 3.4) Expressions
- 4) Types and booleans
- 5) While loops
- 6) For loops
  - 6.1) range Function
- 7) Conditionals
- 8) Functions
- 9)  Pause and  Think
- 10) In-Class
  - 10.1) Expressions
  - 10.2) Countdown
  - 10.3) Fibonacci
- 11) Canvas Quiz

# Types and Casting

- **Types** in Python
  - int: integers
  - float: decimal-point numbers
  - bool: True or False (Boolean values)
- **Expressions** : values and operations that evaluate to a value (int, float, bool, etc.)

```
a = 4.0
b = 3 * 2 + 4 ** 2

x = True
y = 9 < 4
```

- **Casting**: changing the data type of a value to another
  - 3.3 → int?
  - "3.3" → int?
  - Other rules apply!

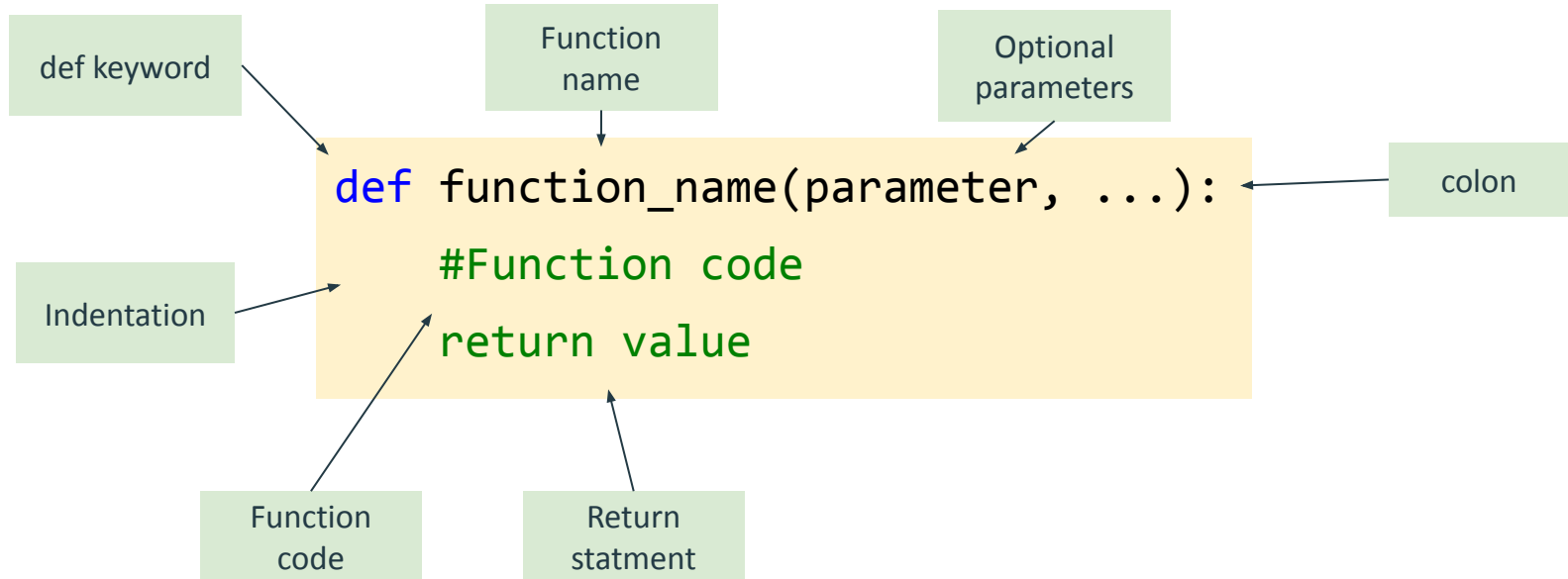
# Loops and Conditionals

- Two types of loops:
  - for: runs for a fixed number of iterations
  - while: runs while a certain condition remains `True`
- Conditionals:
  - Can change behavior of your function depending on certain conditions
  - Only one behavior is chosen from the branches

```
n = 5

if n < 10:
    print('A')
elif n < 20:
    print('B')
else:
    print('C')
```

# Recap: Anatomy of a Function



# Lesson Highlights

- Most of this lesson should have been mostly familiar
  - variables, conditionals, loops, functions, etc.
- New Python syntax things may be the “**newest**” thing you’ve encountered
  - Colons after function and loop definitions
  - No brackets, semicolons, or variable type definitions

## *Main method pattern!*

```
def main():  
    print('Hello world!')  
  
if __name__ == '__main__':  
    main()
```

- Syntax is different (which is okay!)
  - Can’t explain [entire grammar](#). Learn by looking at fragments and playing with code.
  - Gets better with practice! Try things and see how they change the code.
  - Indentation is important!

# Writing our own Function

- Write a file called `hello.py` that prints “Hello World!”

## *Attempt 1*

```
print('Hello World!')
```

## *Attempt 2*

```
def main():  
    print('Hello World!')  
  
if __name__ == '__main__':  
    main()
```

# Group Work: Best Practices

- When working with a new group for the first time:
  - Introduce yourself!
  - If possible, angle one of your screens so that everyone can see and discuss together
  - Be respectful of each other and allow everyone to speak
- Tips:
  - Start with making sure that everyone agrees to work on the same problem
  - Allow everyone to contribute or a chance to ask questions.
  - Ask if everyone agrees and periodically ask each other questions.
  - Call TAs or Adrian over if you need any help.
  - Don't sit in silence.

# Before Next Class

- Go to section!
- Complete Section Assignment 1 on Gradescope
- Complete Lesson 1 Canvas Quiz
  - Due for EC @ 11:59pm Apr 1st
- Read Lesson 2 on the course website
  - Read lesson, you can stop after completing the “Pause and Think” section
  - Encourage you to save the “In-Class” problem for class session.
  - Due for EC @ 11:59pm Friday, April 3rd.
- Make sure you are able to run Python files on your computer