# Getting started with Python

CS 210: Data Management for Data Science

## Jupyter notebook

#### To run Jupyter:

- · run "jupyter notebook" on the command line
- · open the URL it prints in a web browser
- navigate to your notebook

## Jupyter

A jupyter notebook consists of a series of cells.

They're usually executed in order. (But not necessarily!)

## **Variables**

What does this program print?

```
myVariable = 10
myVaraible = 20
print(myVariable)
```

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## Data types

#### So far:

- str
- · int, float
- bool

#### Later:

- · list, tuple, range
- dict
- NoneType

#### Comments

```
# Let's print something
print(2 + 3)

dt = 0.1 # simulation timestep

# You can also do
# multi-line
# comments!
```

#### Puzzle

```
What does this program print?
print("Hello")
  print("world")
```

### **Booleans**

There are two values in the **bool** type:

- True
- False

## Boolean operators

x and y True if both x and y are True

x or y True if at least one of x, y is True

not x True if x is False

### **Functions**

```
def myFunc():
    print("funky")
```

#### Main

```
What does this program print?

def main():
    print("Hello, world!")
```

# Strings

s1.endswith(s2)	Does s1 end with s2?
s1.startswith(s2)	Does s1 start with s2?
s1.find(s2)	Find index of s2 in s1
s.isalpha()	Does s use only letters?
s.isdigit()	Does s use only numbers?
s1.replace(s2, s3)	Replace occurrences of s2 with s3 in s1
s.strip()	Remove whitespace at the beginning/end of s

## Generate a web page

Let's write a python program to create a basic web page.

- name
- title
- · room
- phone