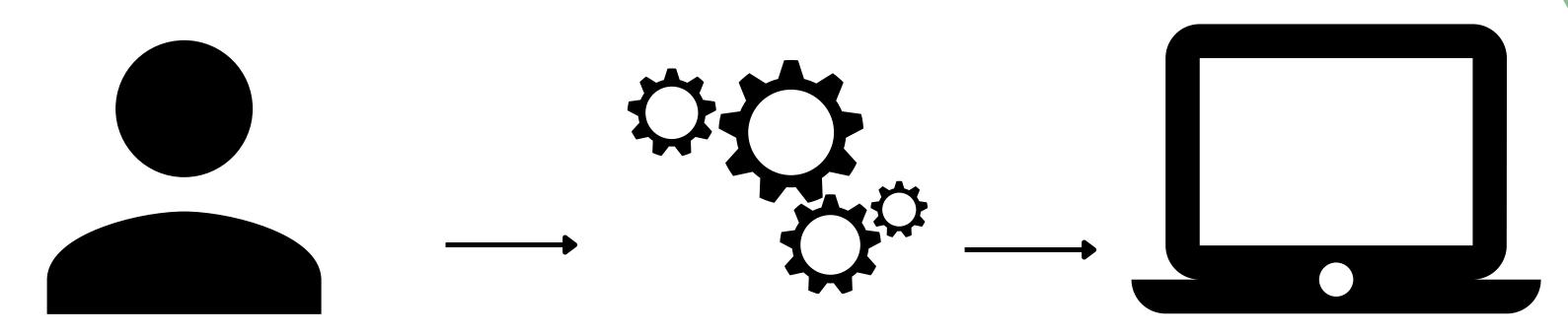


### Python

#### How do computers read code?



#### **PYTHON**

The Python code is run and given to the computer

#### **INTERPRETER**

The computer compiles this code into another language: C

#### **COMPILER**

C is then given to the interpreter which breaks the C code into 0s and 1s which the computer reads

#### The All In Al Teaching Path



#### **SLIDES**

Digest the material presented in lectures. (eg. our diagrams). Learn the function and purpose of the coding topic

#### **VIDEOS**

Watch and code along the videos in the slide show and try to understand the syntax

#### PROBLEM SOLVING

Log onto Replit and work on the problems alone or with friends!

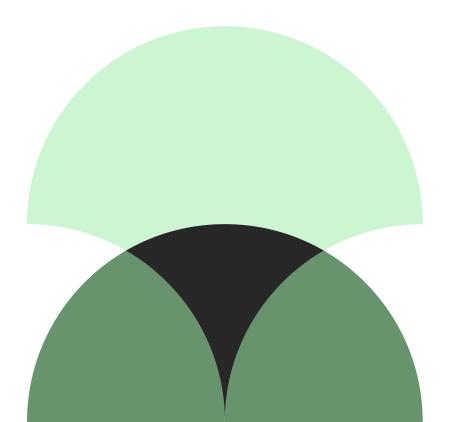
## <u>replit</u>



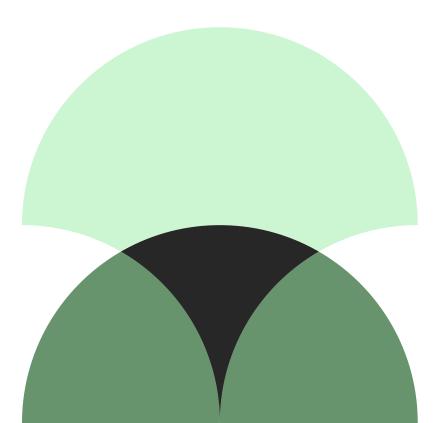
Replit is where we will be coding this camp!

## print("Hello World")

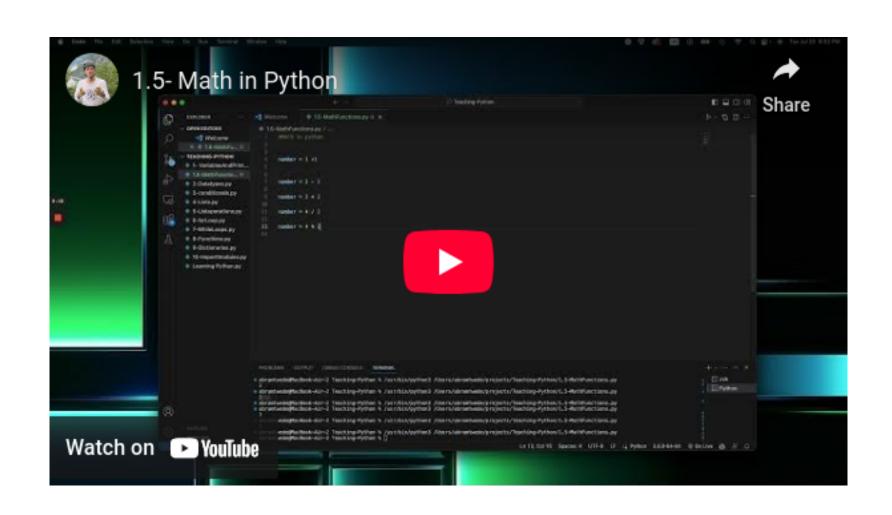


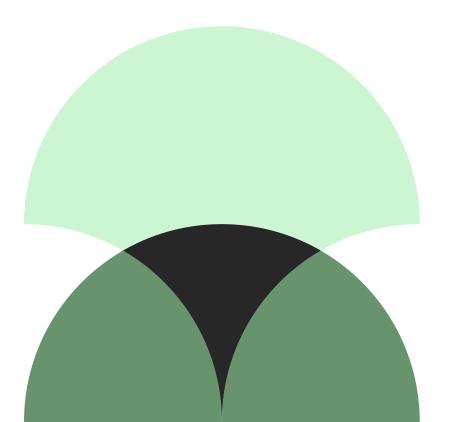


# x = 10 print(x)

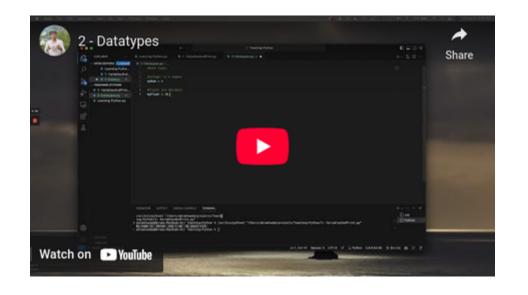


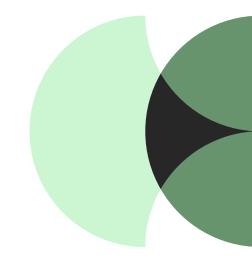
# Math Operations(+-/\*=)





#### Data Types





1, 2, 3, 4

1.0, 2.0, 3.0, 4.0 "HELLO"
"10"

#### **INTEGER**

Can be any positive or negative whole number

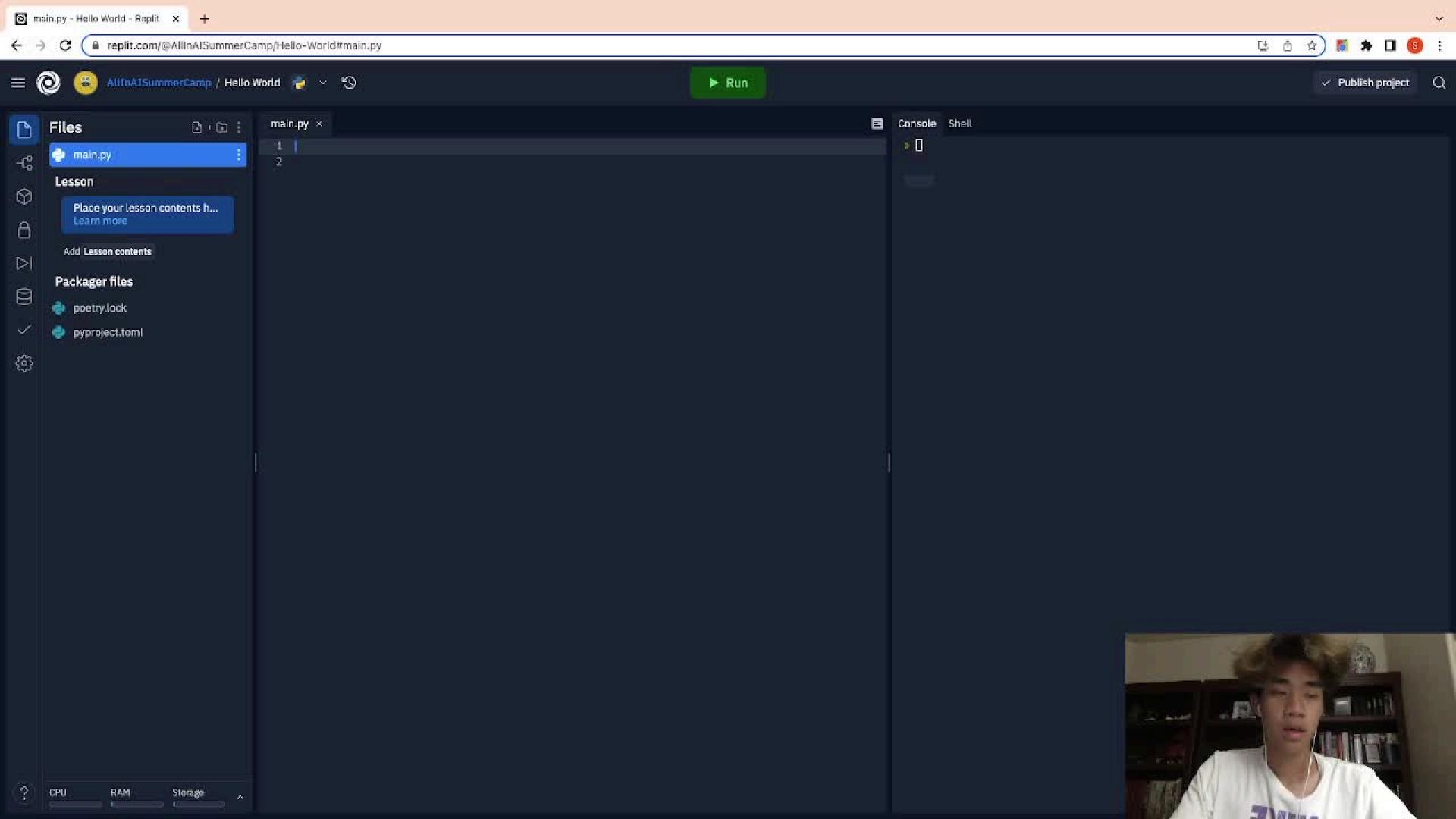
#### **FLOAT**

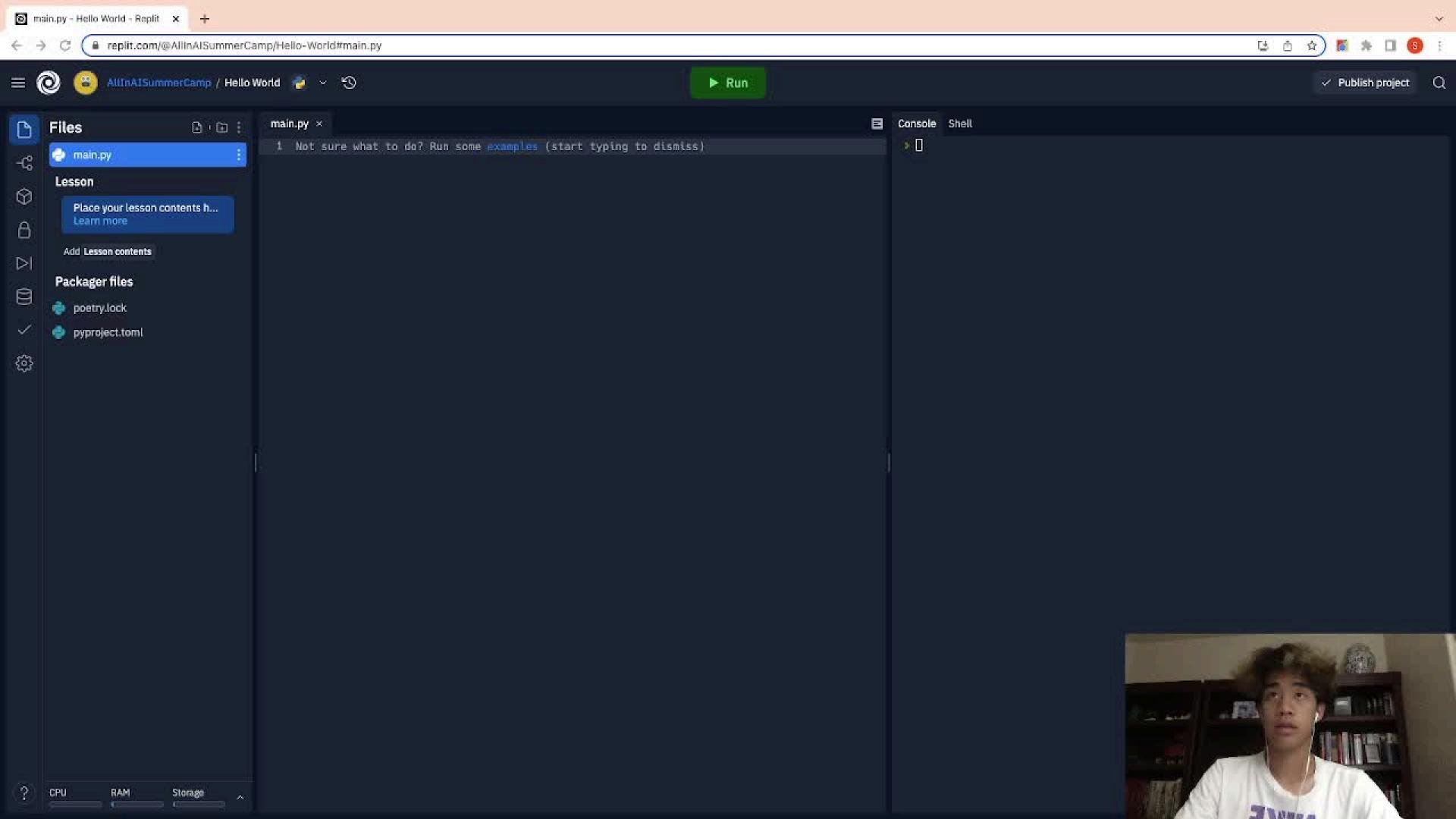
Any number with a decimal point

#### **STRING**

Any value in between quotes. English words must be strings

### Legacy Videos

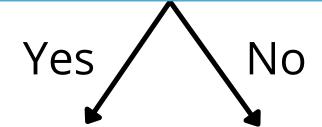




## Variables, Operators, and Output Practice

## Conditional Statements

Grade more than 90?



Grade = A

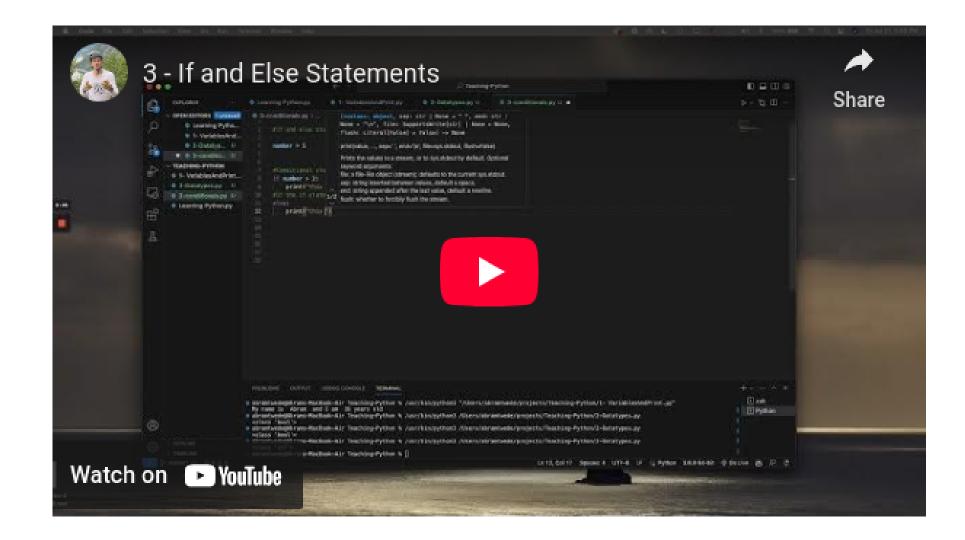
Grade = B

if(condition):
 print('a')
elif(condition):
 print('b')

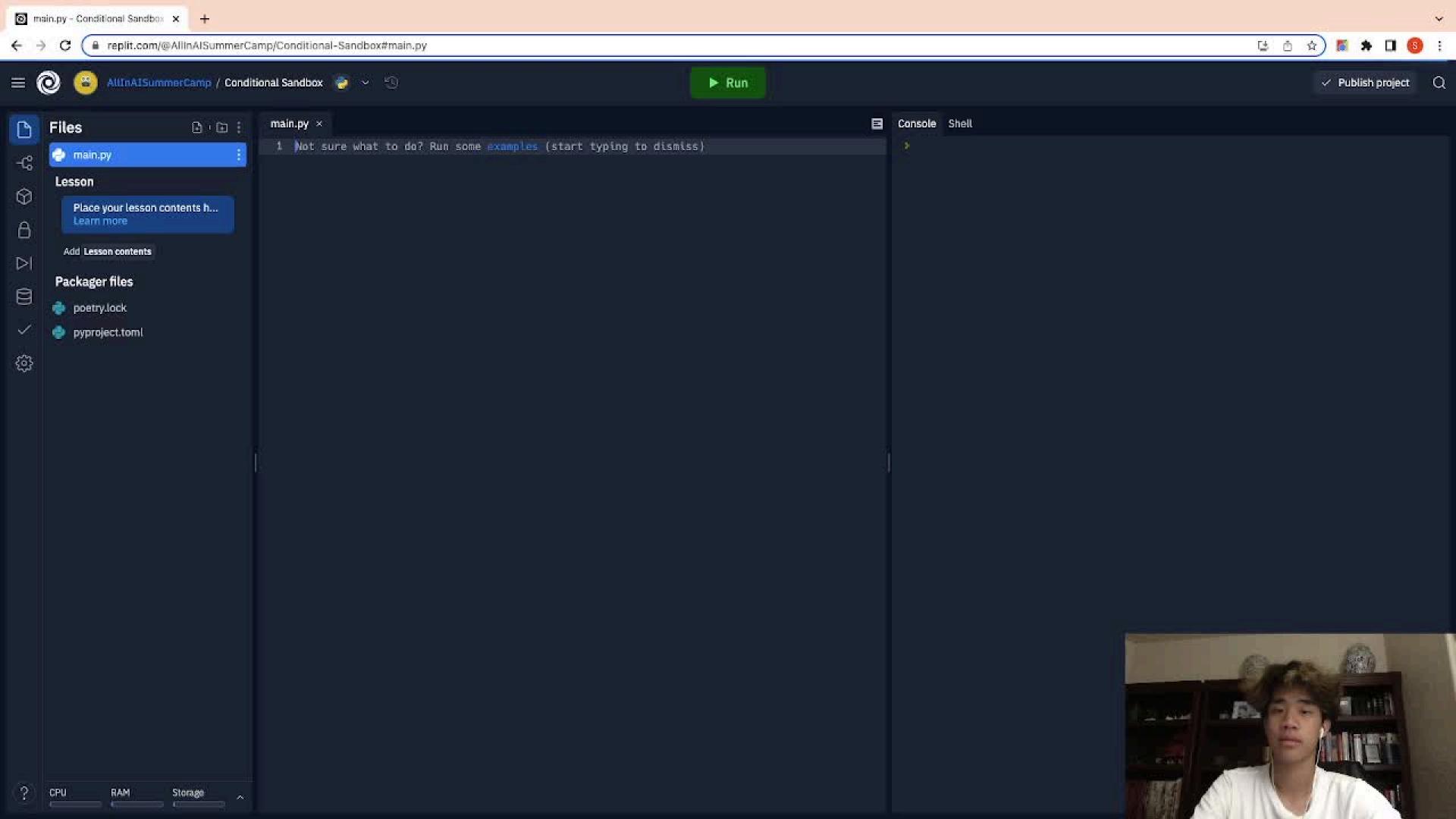
#### Conditionals

Conditionals let you run certain code based on if else statements. Think back to the pseudocode game

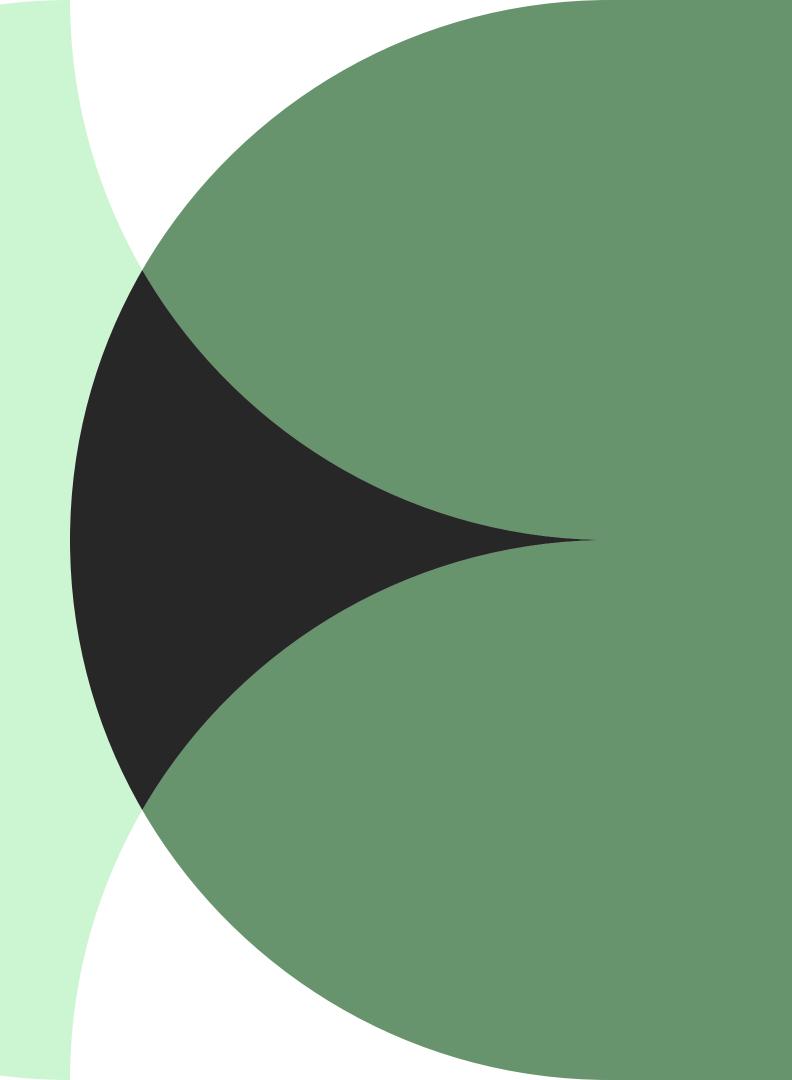
#### Conditionals



#### Extra video



## Conditional Statement Practice



## while loops

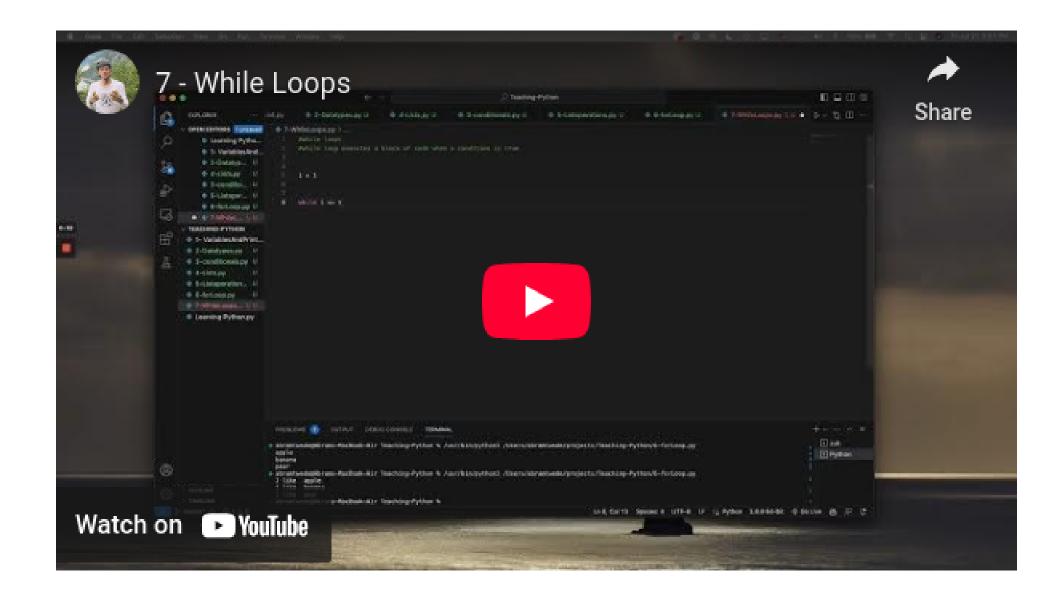
### 

Output:1, 2, 3, 4, 5

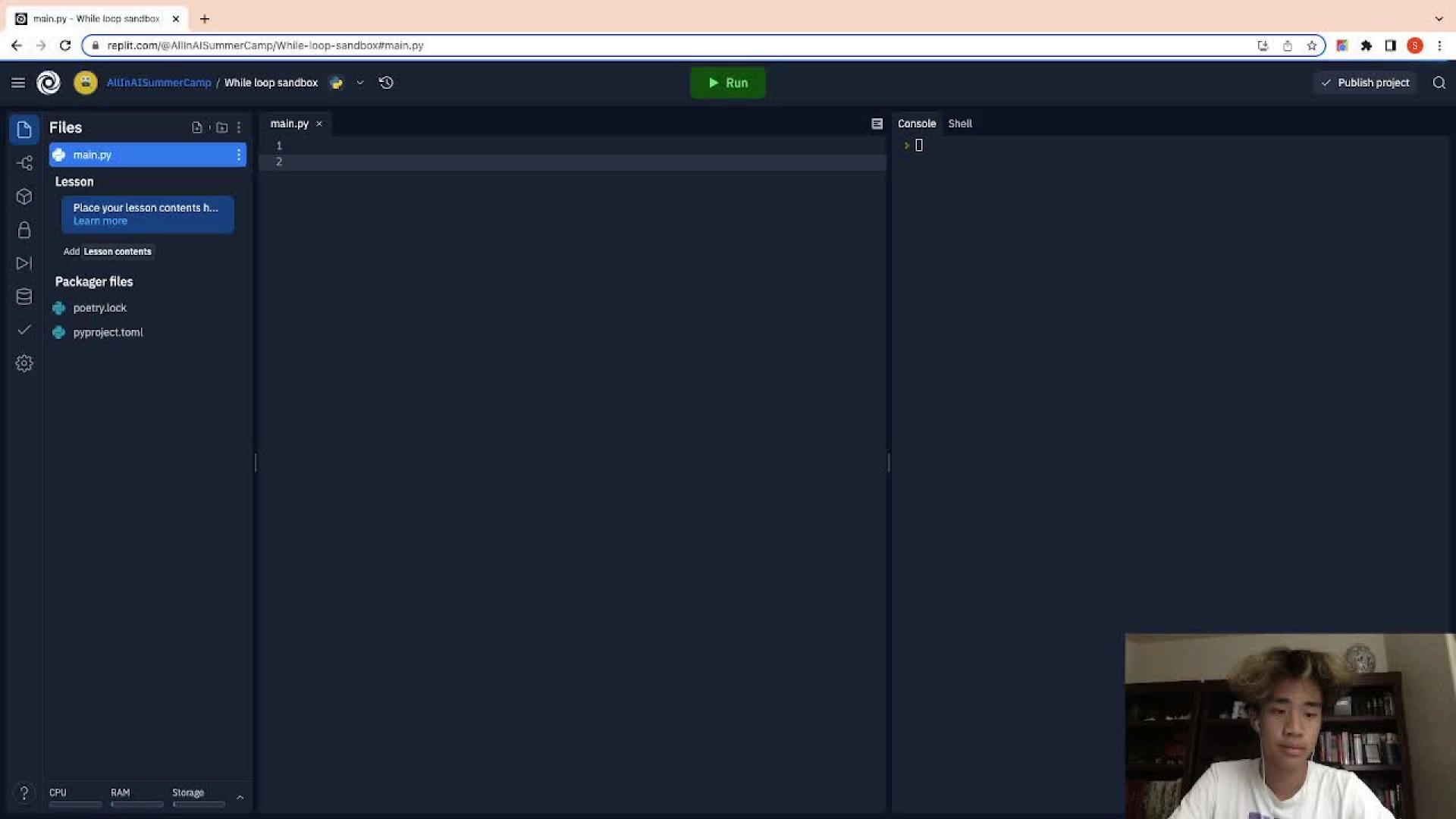
#### While loops

While loops repeat an action while a conditional is true. This is very similar to the repeats in the pseudo code

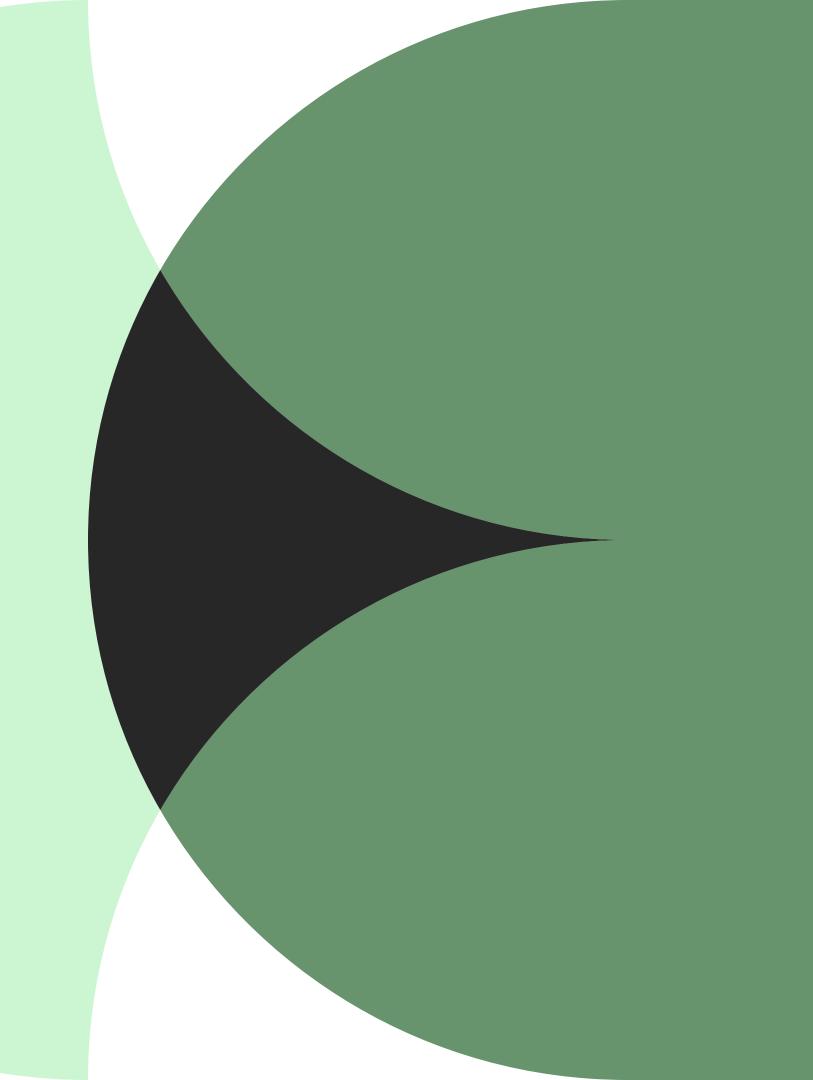
### While loops



#### Extra video



# While Loop Practice



### lists

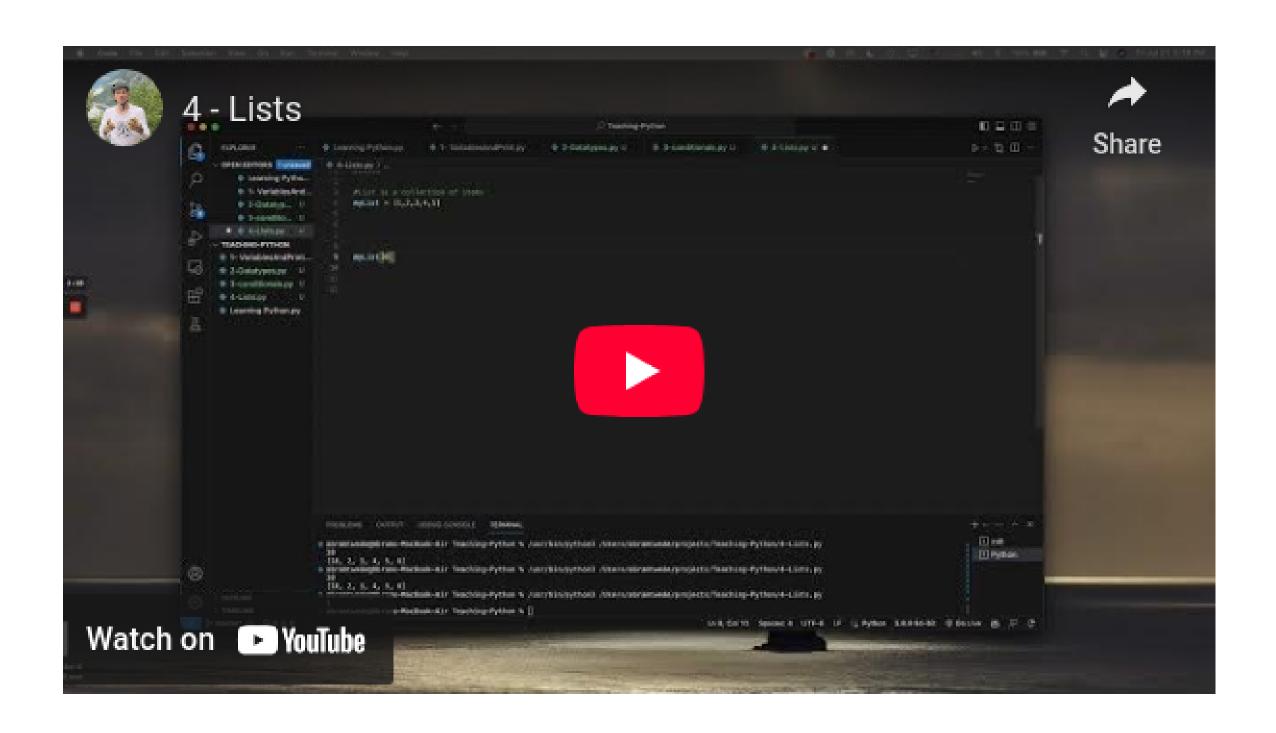
## list1 = ['Apple', 99, 'Hello World']

Index	ltem
0	Apple
1	99
2	Hello World

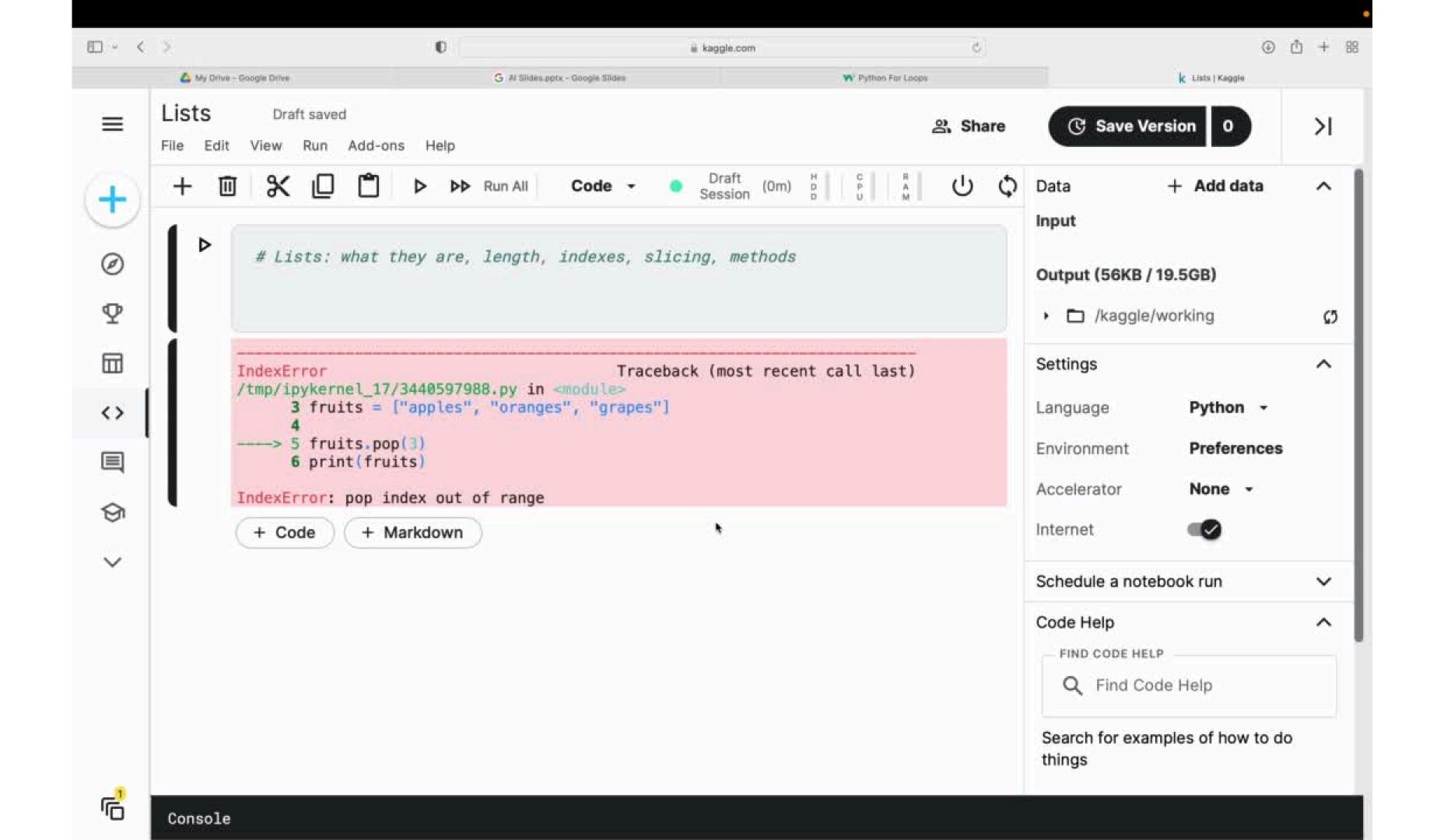
#### Lists

Lists are a data type that hold many other data types, even itself! You access, delete, and add any value with ease

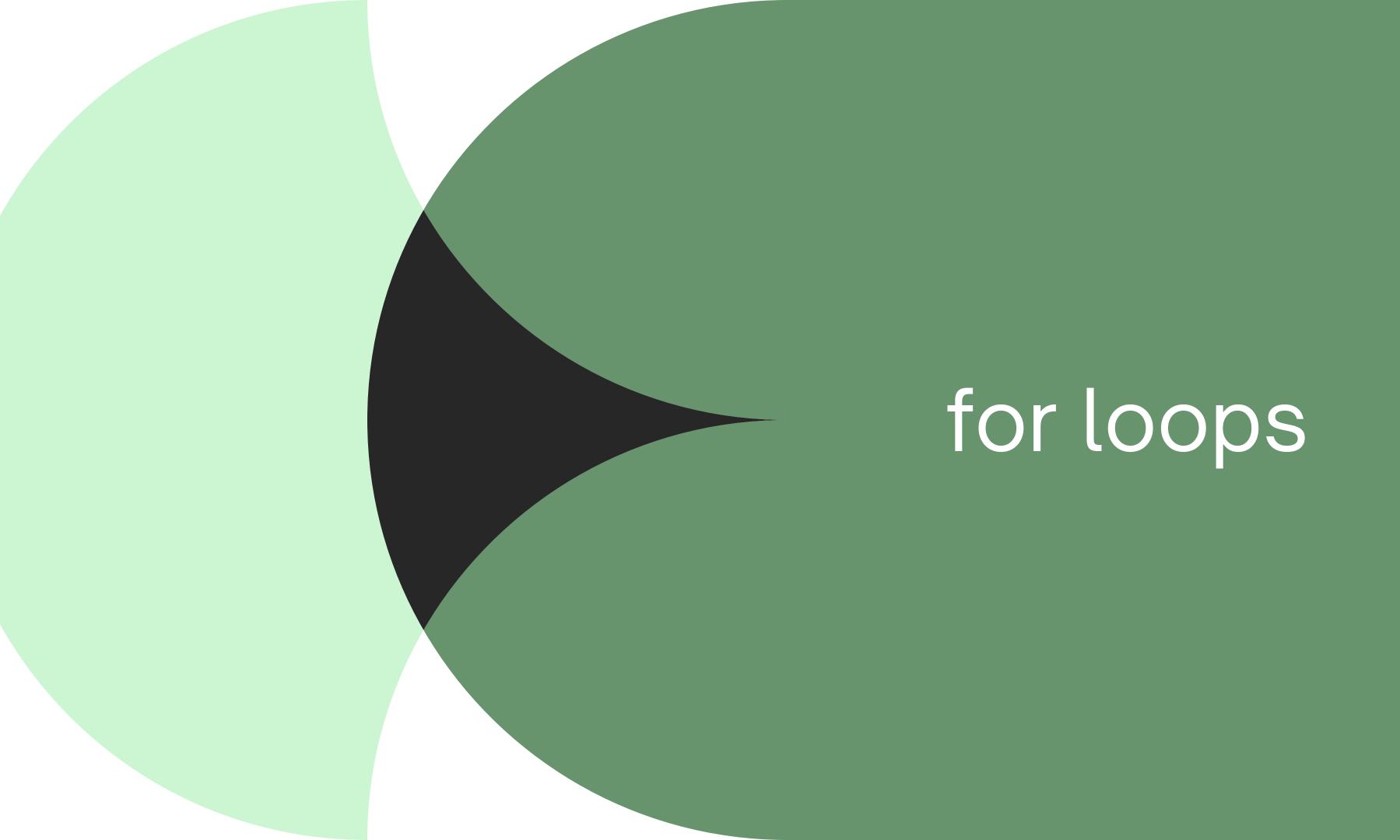
#### Lists

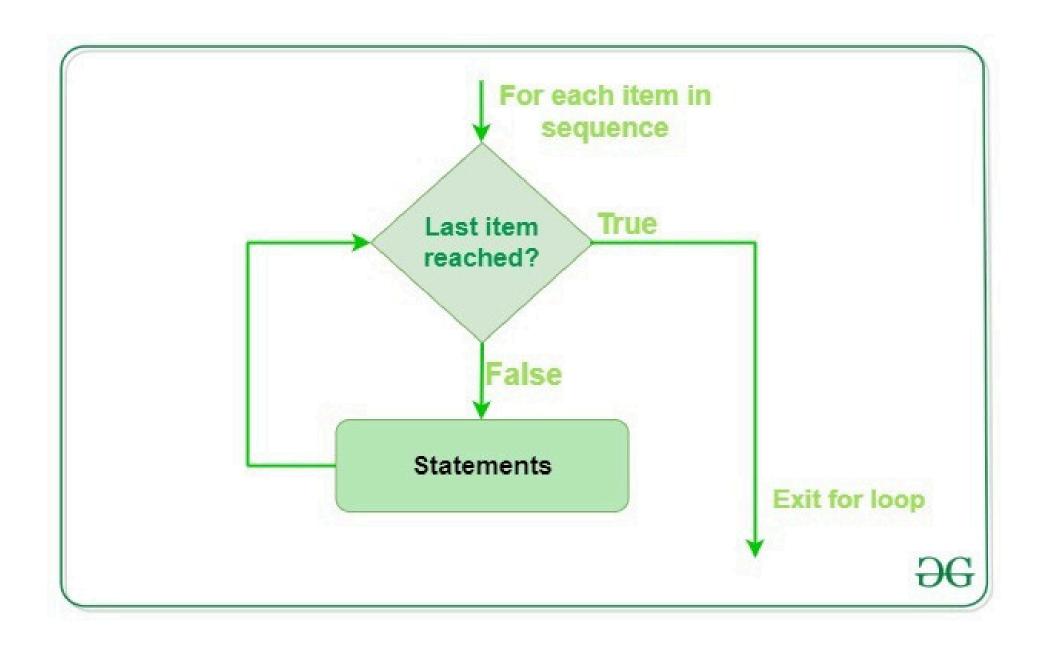


## Extra video from our founder Aadi!



## List Practice

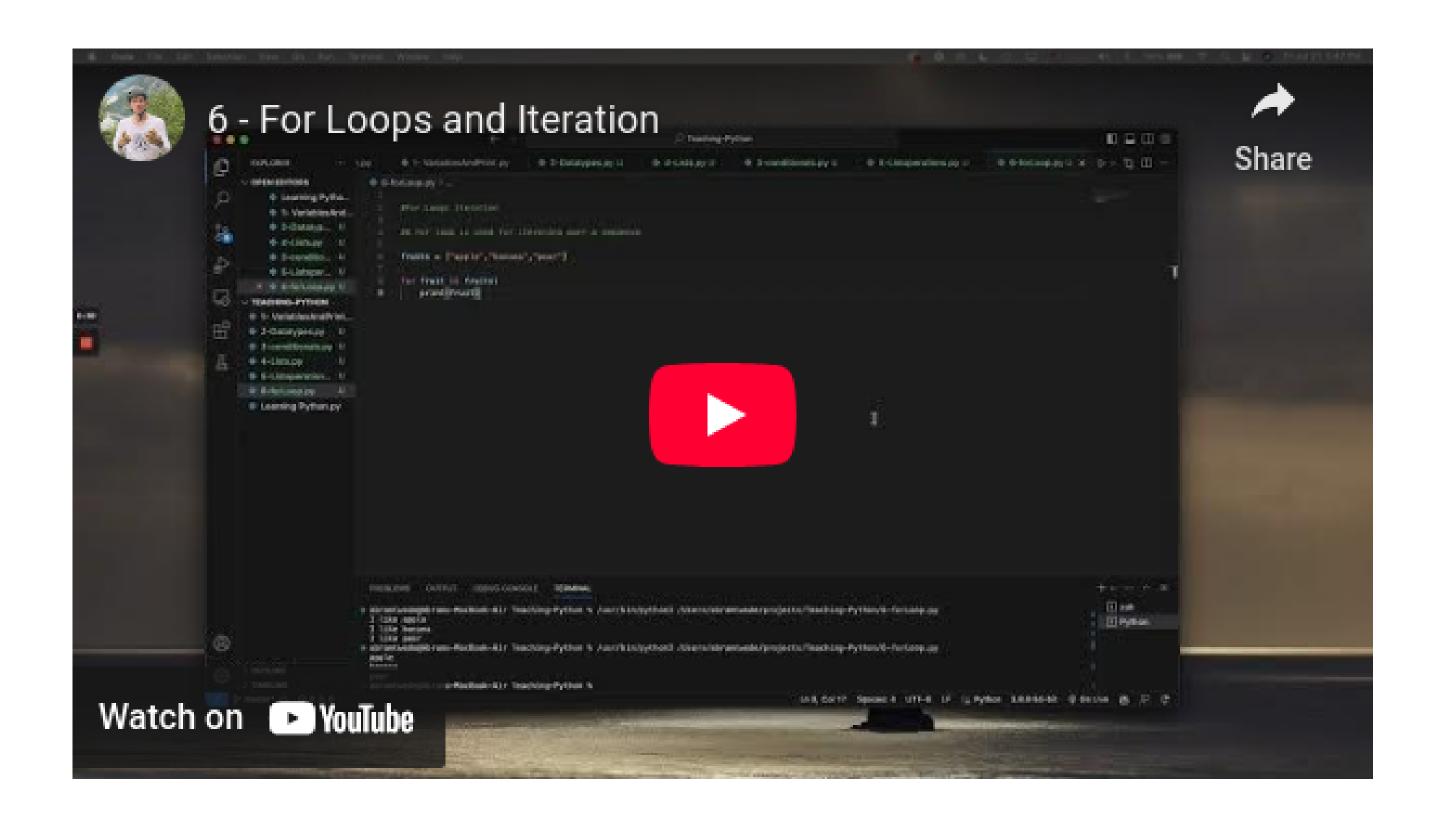




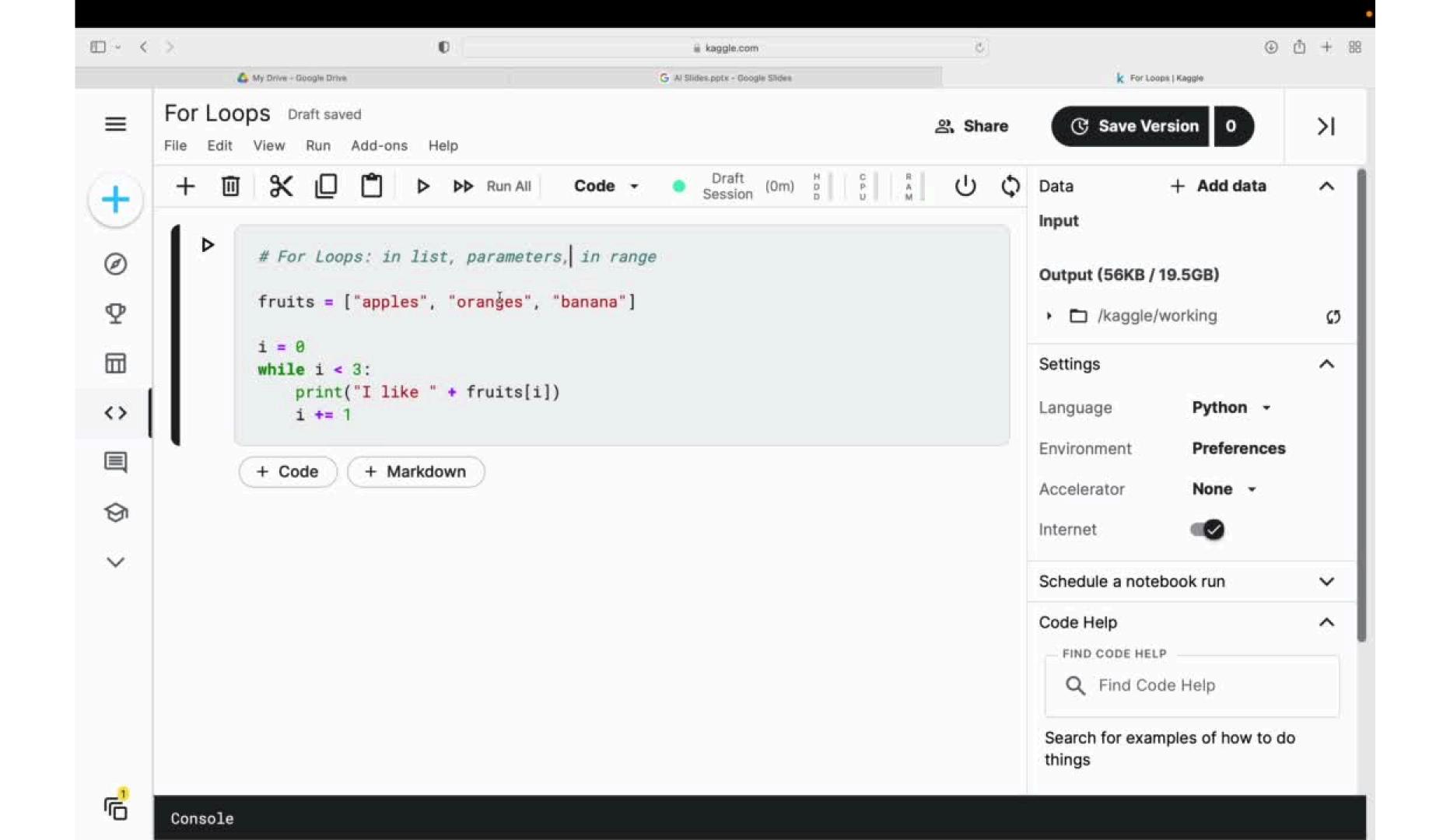
#### For Loops

For loops let you run through sequences (ranges and lists) without needing to create a condition like while loops.

Remember you can always ask counselors for help



## Extra video from our founder Aadi!



# For Loops Practice