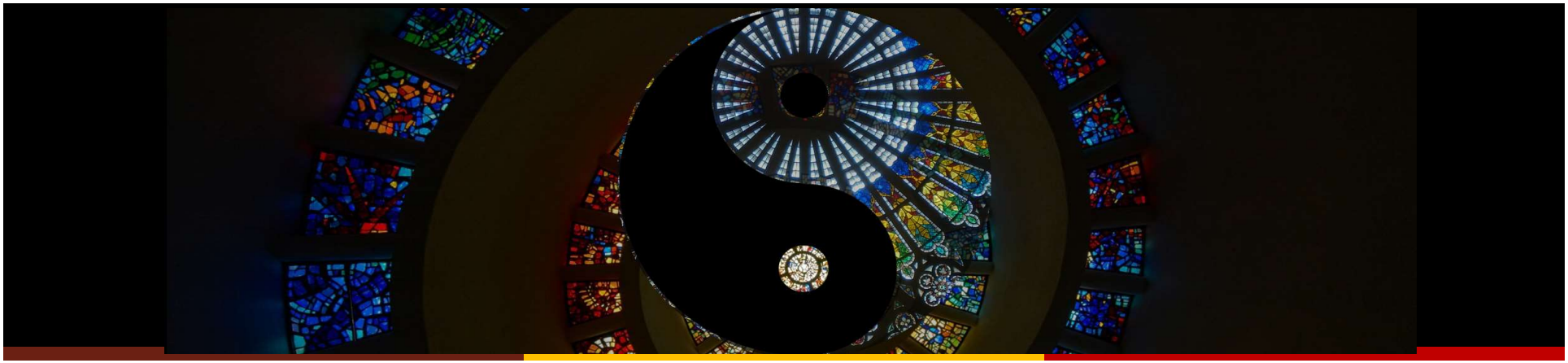

GEC 1506 – Lab 1

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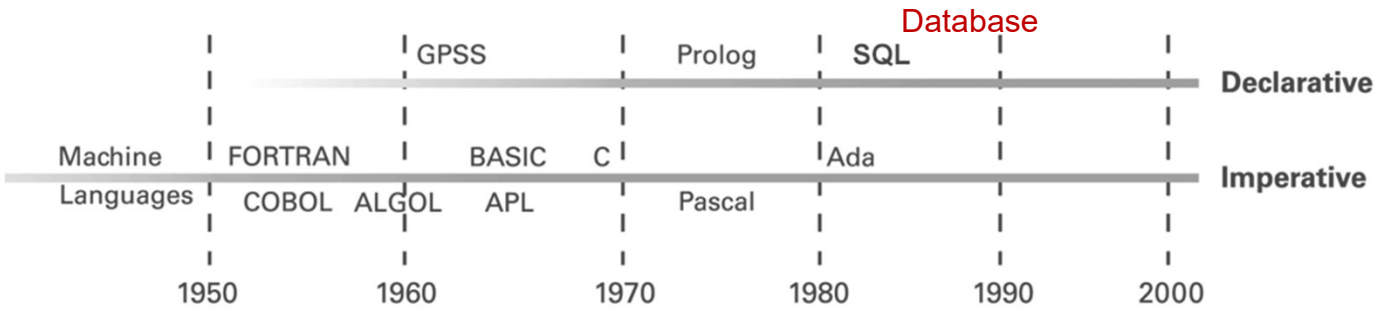
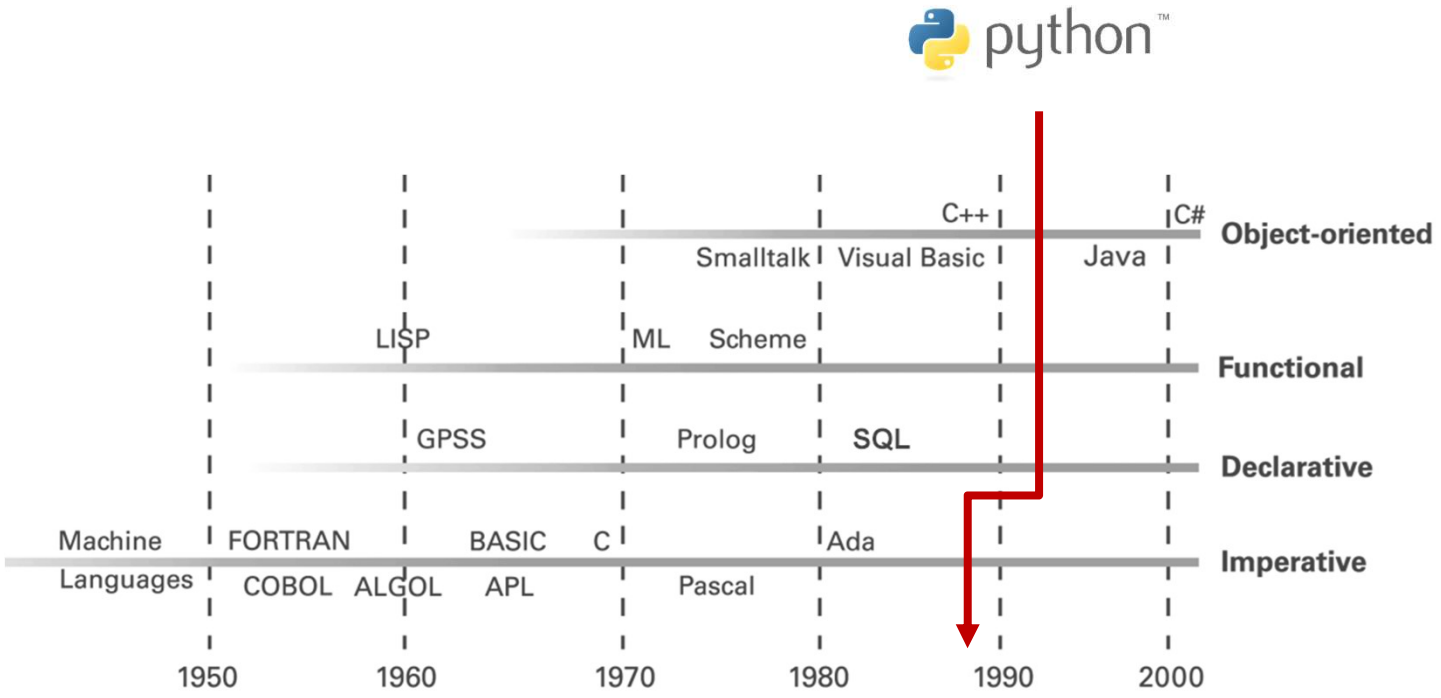
Python

Evolution Of Programming Paradigms

- Declarative programming
  - Expresses the logic of a computation
  - Without describing its control flow
- Imperative programming
  - Uses statements that change a program's state



Evolution Of Programming Paradigms



Programming Language Rank

Feb 2024	Feb 2023	Feb 2022	Feb 2021	Feb 2017	Programming Language	Ratings
1	1	1	3	5	Python	15.49%
2	2	2	1	1	C	15.39%
3	3	4	4	3	C++	13.94%
4	4	3	2	2	Java	13.21%
5	5	5	5	4	C#	6.38%
6	7	9	9	9	Java Script	3.17%
7	8	-	-	-	SQL	1.82%
9	6	6	6	8	Visual Basic .NET	1.52%

https://www.tiobe.com/tiobe-index/

Python
Installation & Environment

If you would like to set up the environment in your own computer

Installation Anaconda (Windows user)

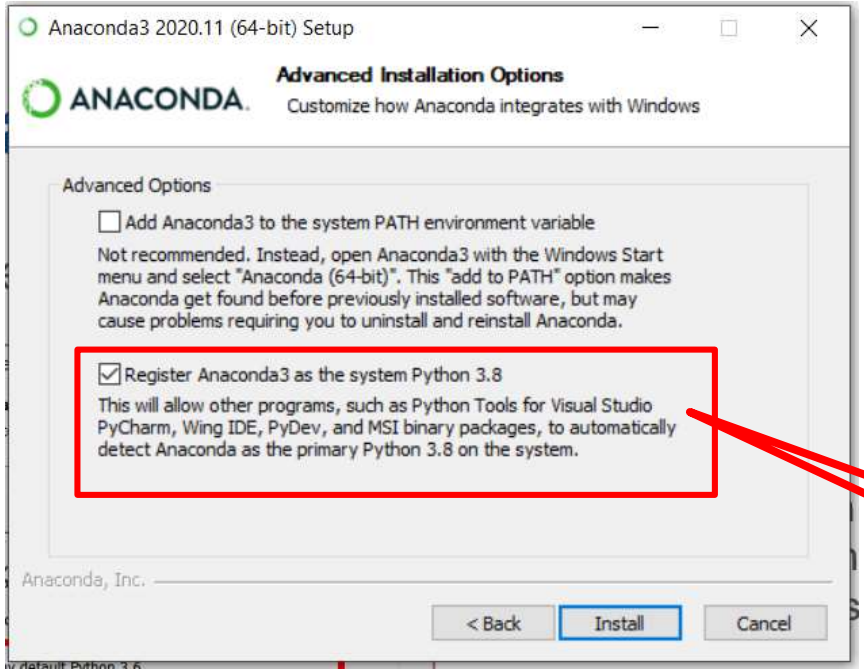
https://www.anaconda.com/products/individual#Downloads

Download python version > 3.6

Install the python through the setup guide.

Installation

You will see the following options.



You can skip it, If you want to install more anaconda/python in different versions.

The two setting may cause some problems

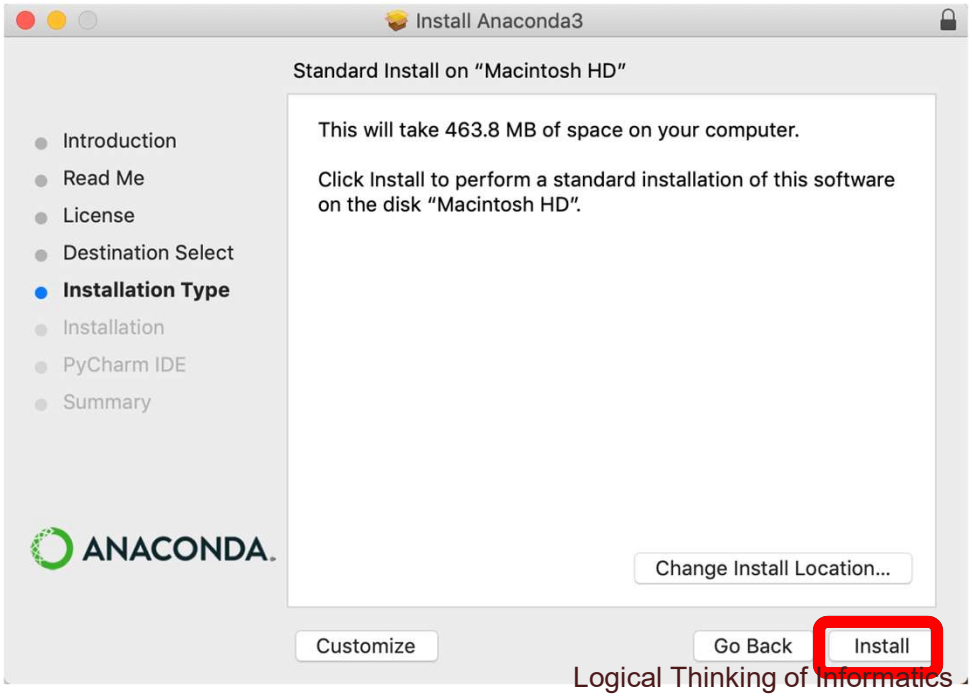
Please select this

Installation Anaconda (Mac user)

https://www.anaconda.com/products/individual#Downloads

Installation

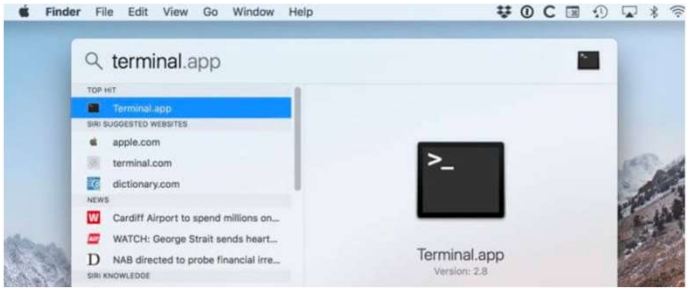
You will see the following options.



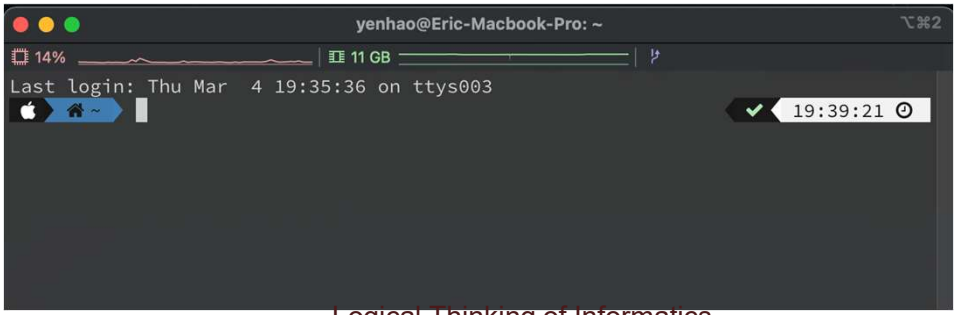
Don't need to change any settings

Terminal (Linux only)

- Launch terminal



- Now you can run the python and its with terminal.

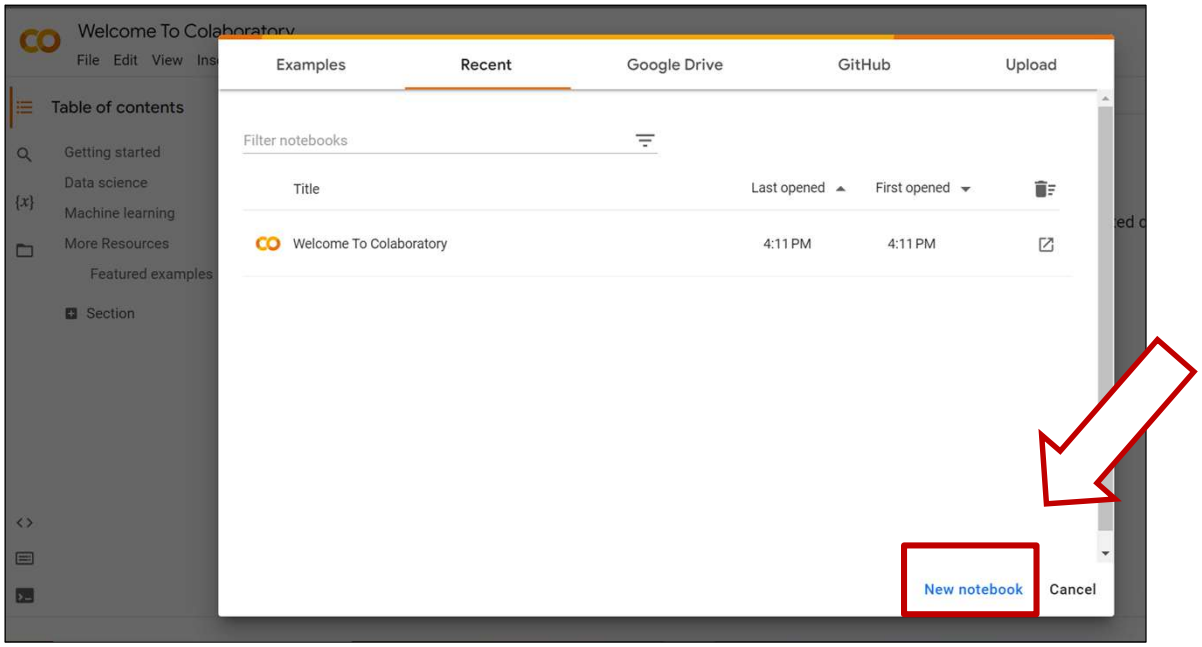


Google Colab

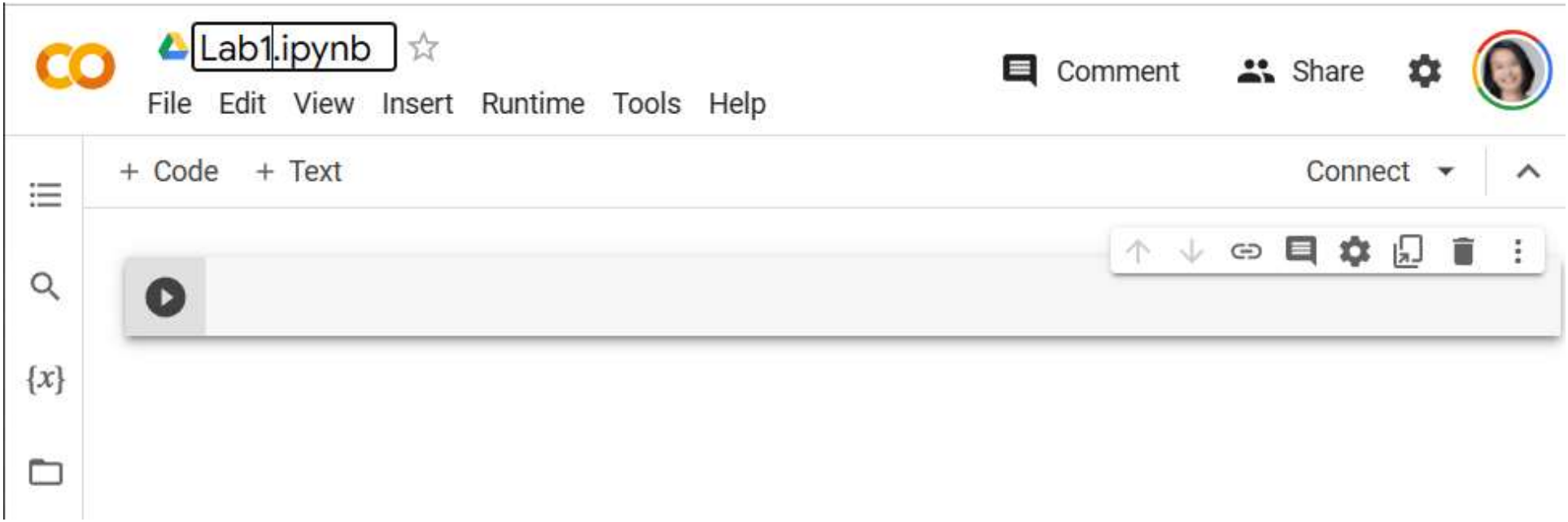
You need Internet from HERE

Login to your Google Account

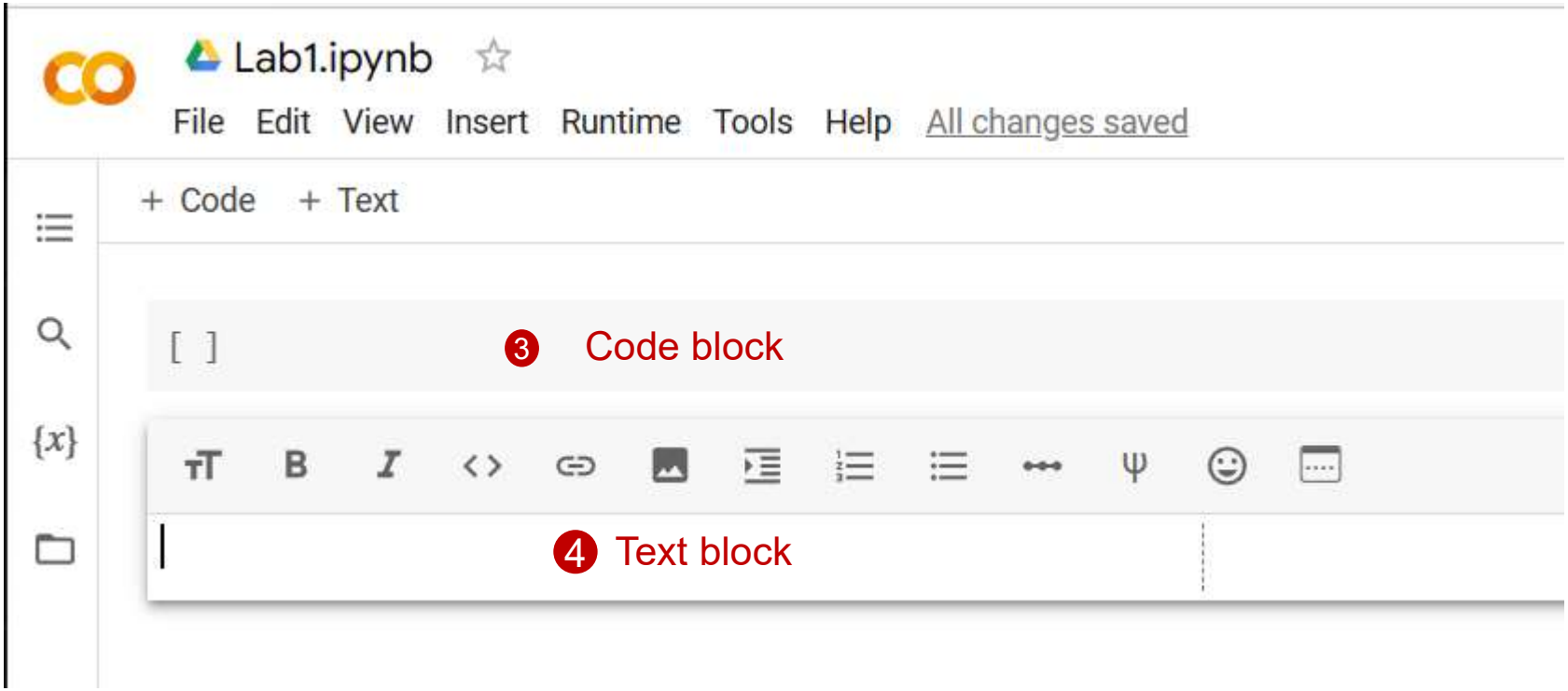
- Start using Google Colab https://colab.research.google.com/



Update File Name



Blocks


Lab1.ipynb
File Edit View Insert Runtime Tools Help All changes saved
+ Code + Text
[ ]
3 Code block
4 Text block

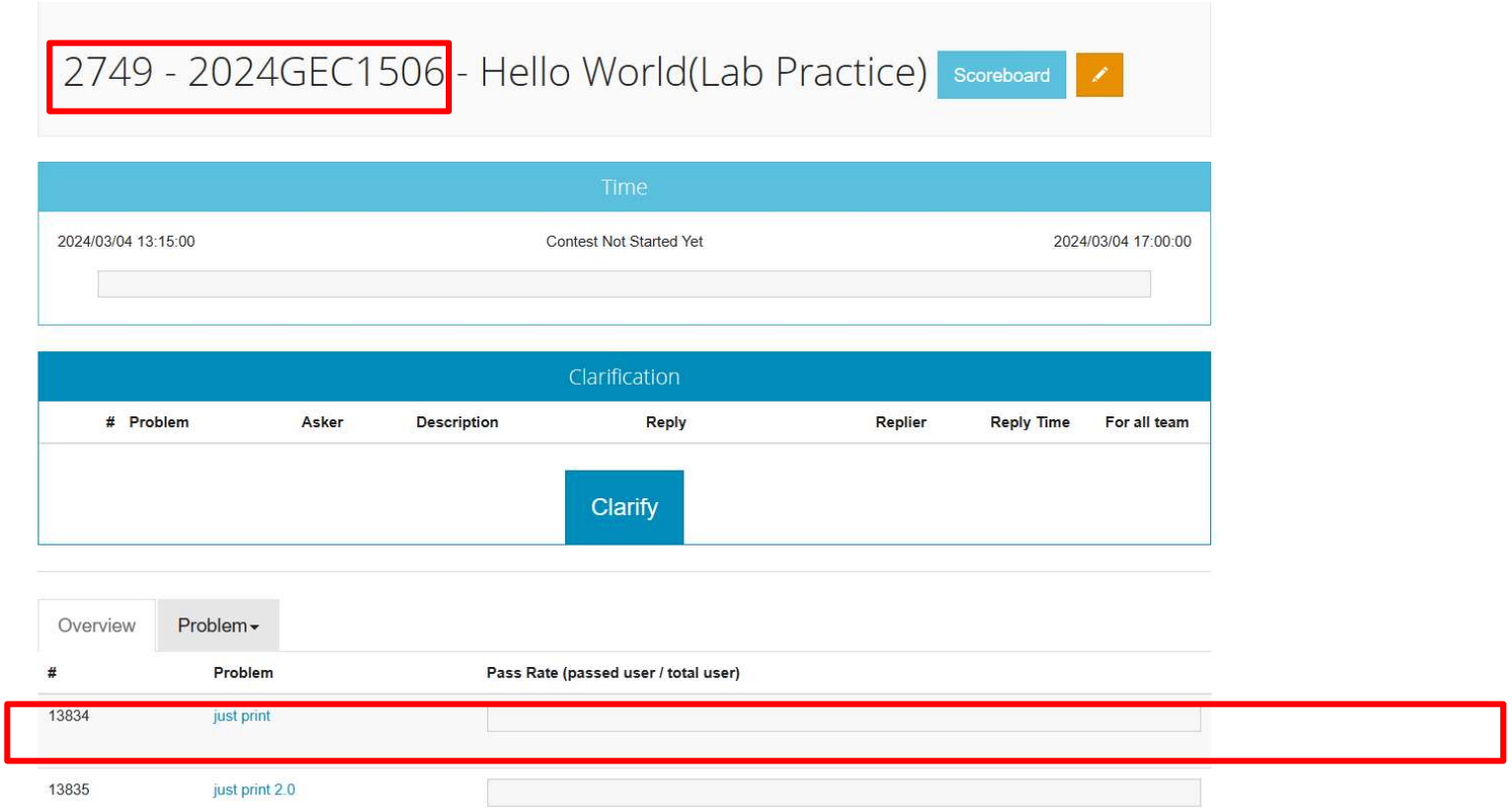
Print Out a Text

- If you want to print out a plain text in Python, we can use a function called print(“...").

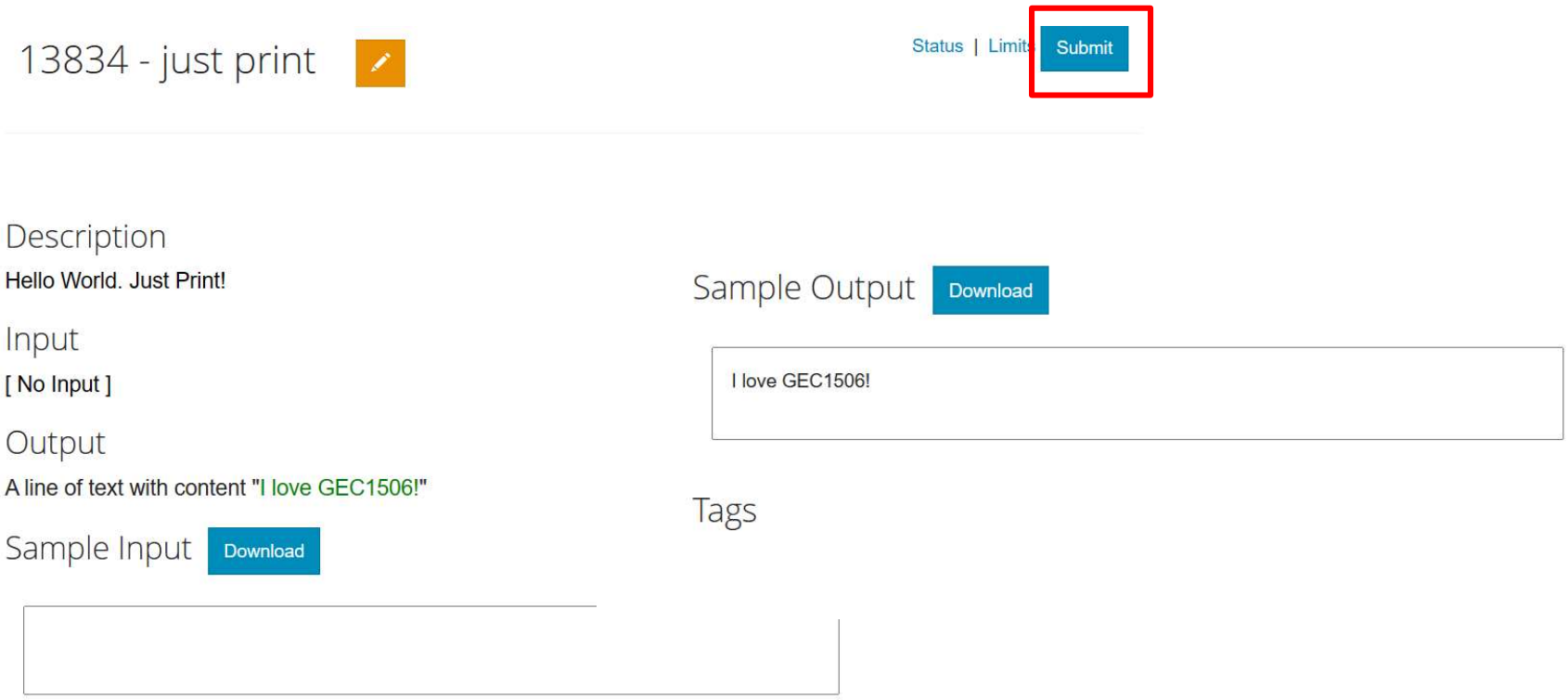
- Ex: print("Hello world”)

Test on OJ

Find the test



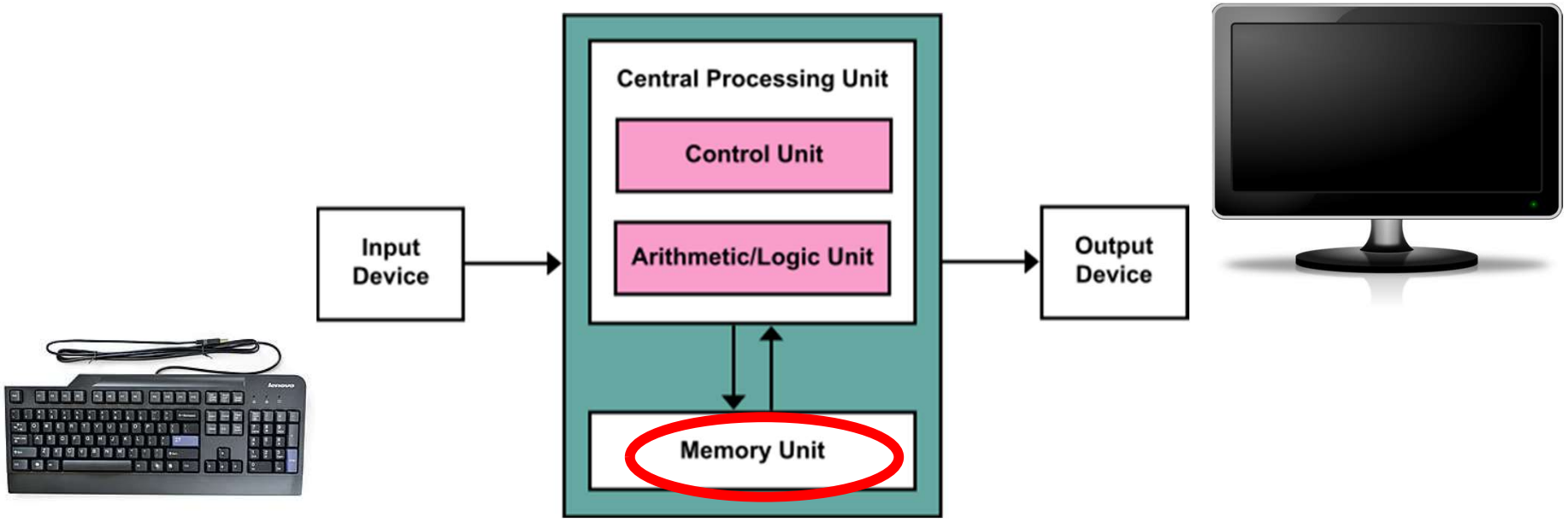
Question


13834 - just print
Status | Limits
Submit
Description
Hello World. Just Print!
Input
[No Input]
Output
A line of text with content "I love GEC1506!"
Sample Input
Download
Sample Output
Download
I love GEC1506!
Tags

Variable

Variable

- Variables are spaces to store values in computers



Append Multiple String

- Use ‘+’
- Ex:

```
input2="! Happy!"
print(inputText+input2)
```

Append an New Line

- Use “\n”
  - Ex:

```
input3="\n"
print(inputText+input3+input2)
```

Get An Input String

- input()

Exercise

- Construct some codes that produce the output "This is Amazing!" when the input is "Amazing," and "This is Great!" when the input is "Great".