

KEY CONCEPTS:

In class, we got started with our programming environment at <http://colab.google>

1. We launched a new notebook to create a new file and renaming it (it saves itself)

2. We displayed information by using the `print()` command. Examples:

```
a. print("Hello World!")
b. print(34)
c. print(4 * 5)
d. print(3 + 5)
```

3. We printed some **concatenated** text:

```
print("My name is : " + "yourname")
```

Note: for strings(text) you can use single or double quotes in python)

4. We deliberately generated some **syntax** errors:

```
print("a" + 3) #mixing data types
print("sometextwithoutendquote) #missing quotes
print(3 #missing parenthesis
```

5. We started to deal with some variables (things that hold data)

```
a = 10
b = 20
c = a + b
print(c)
```

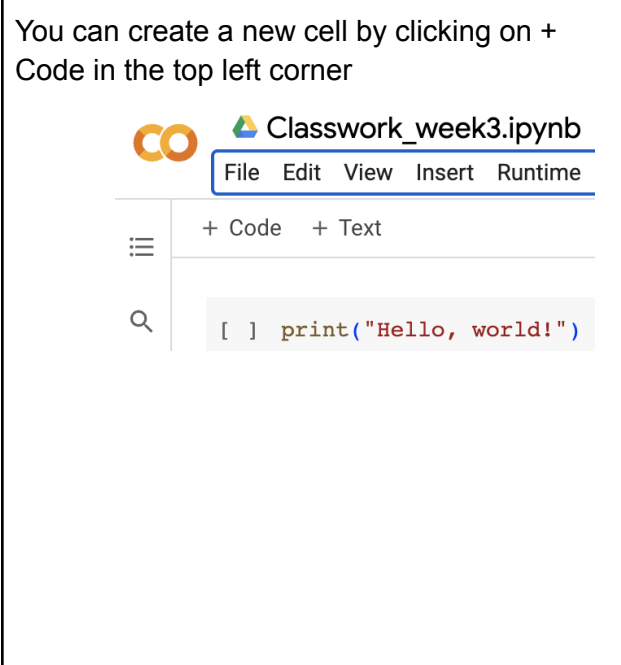
```
my_name = "Ami"
my_age = 100
my_grade = 12
```

```
print(my_name)
print(my_age)
print(my_grade)
```

```
my_age = my_age + 1
print(my_age)
```

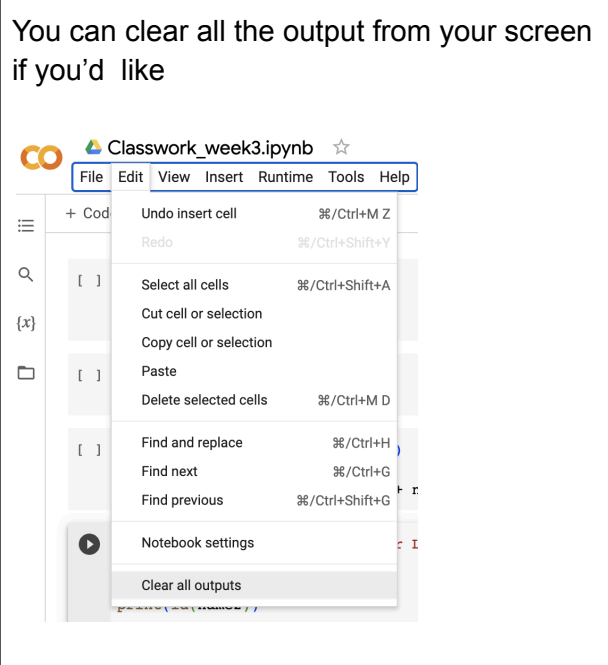
A few additional notes:

You can create a new cell by clicking on + Code in the top left corner



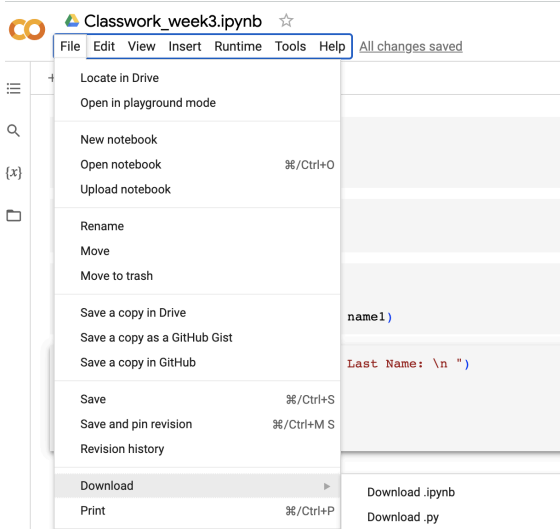
The screenshot shows the top left corner of the Jupyter Notebook interface. The title bar reads 'Classwork_week3.ipynb' with a 'File Edit View Insert Runtime' menu. Below the title bar, there are two buttons: '+ Code' and '+ Text'. The '+ Code' button is highlighted with a blue box. Below the buttons, there is a code cell containing the text `print("Hello, world!")`.

You can clear all the output from your screen if you'd like



The screenshot shows the 'Tools' menu in the Jupyter Notebook interface. The menu is open, and the 'Clear all outputs' option is highlighted. The menu items include: 'Undo insert cell', 'Redo', 'Select all cells', 'Cut cell or selection', 'Copy cell or selection', 'Paste', 'Delete selected cells', 'Find and replace', 'Find next', 'Find previous', 'Notebook settings', and 'Clear all outputs'.

You can download the code to your machine by clicking File >> Download >> Download .ipynb



The screenshot shows the 'File' menu in the Jupyter Notebook interface. The menu is open, and the 'Download' option is highlighted. The menu items include: 'Locate in Drive', 'Open in playground mode', 'New notebook', 'Open notebook', 'Upload notebook', 'Rename', 'Move', 'Move to trash', 'Save a copy in Drive', 'Save a copy as a GitHub Gist', 'Save a copy in GitHub', 'Save', 'Save and pin revision', 'Revision history', 'Download', and 'Print'. The 'Download' option is highlighted, and a sub-menu is visible with the options 'Download .ipynb' and 'Download .py'.

This downloaded file will be what you upload into the homework assignment in the Google Classroom.

HOMEWORK:

Hint: use a separate cell for each problem! Save the Python script file with name: *yourname_homework1.ipynb*

1. PROBLEM 1

- A. Assign your name, age and grade to the variables `my_name`, `my_age` and `my_grade` respectively
- B. Print the following sentences to the screen making the right substitutions:
 - a. Hello, my name is `my_name`. I am `my_age` years old and attend grade `my_grade`.
 - b. In 5 years, I will be `my_age + 5` years old

2. PROBLEM 2

- A. Assign the value 3.14 to the variable `pi`
- B. Assign a number between 2 and 20 to the variable `r`
- C. Calculate the area and circumference store them in variables `c_area` and `c_circ`
- D. Print the following sentence making the right substitutions:
 - a. For a circle with radius `r`, the area is ... and the circumference is

3. CHALLENGE PROBLEM 3

Try to print the following ASCII art: hint - print one line at a time

```
 , i , :-'""'- . , i ,
 \\|/ .' ' . \\|//
 \-;-/ ( ) \-;-/
 // ; ; \\
 //__i :. .; ;__\\
 `-----\'. '-----'. '/-----'
          '!.!.-.-,_.!.!'
jgs      '( (.-'
          ' _'
```