

Lesson 01 Demo 04

Writing and Running a Python Program

Objective: To demonstrate Python's basic syntax while introducing user input and the print function, establishing a foundational understanding of how Python executes code

Tools required: Google Colab

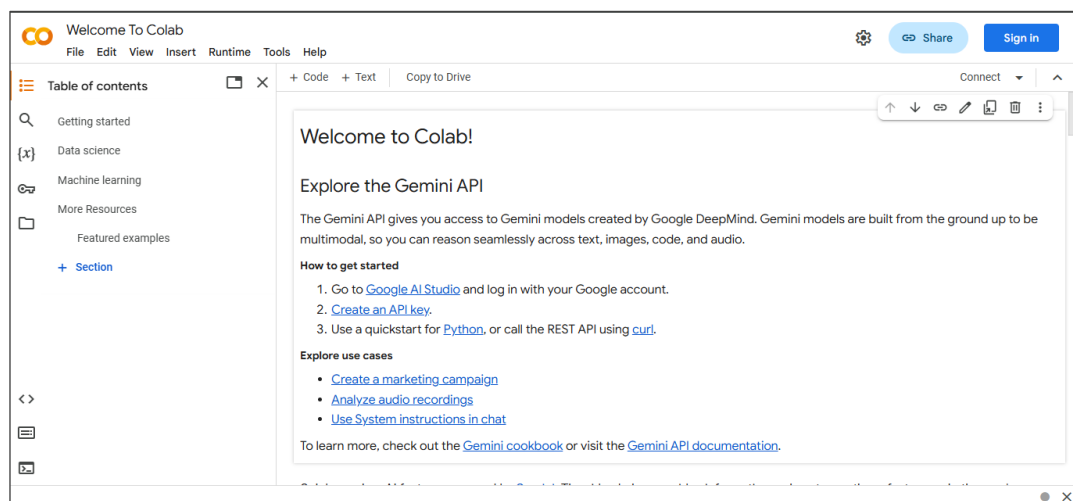
Prerequisites: None

Steps to be followed:

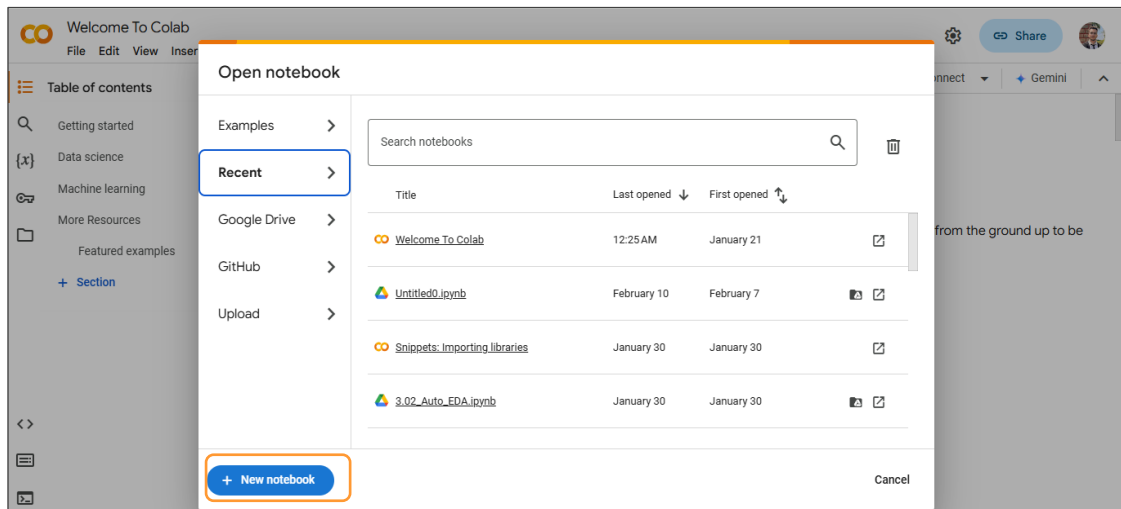
1. Open Google Colab and create a new notebook
2. Write and execute Python code

Step 1: Open Google Colab and create a new notebook

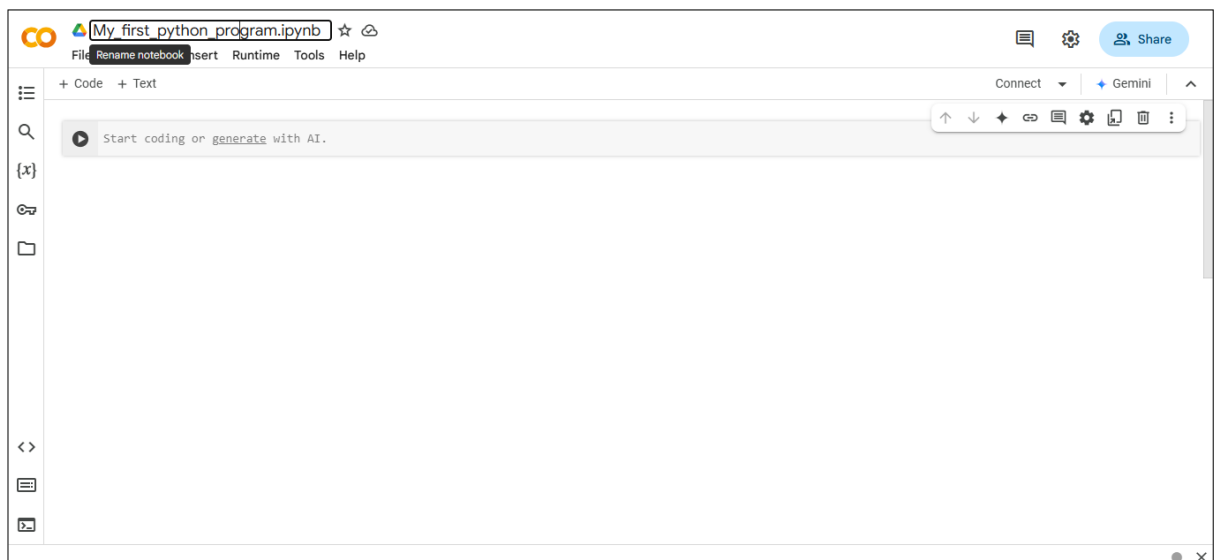
1.1 Open Google Colab: <https://colab.research.google.com/>



1.2 Click on **New notebook**

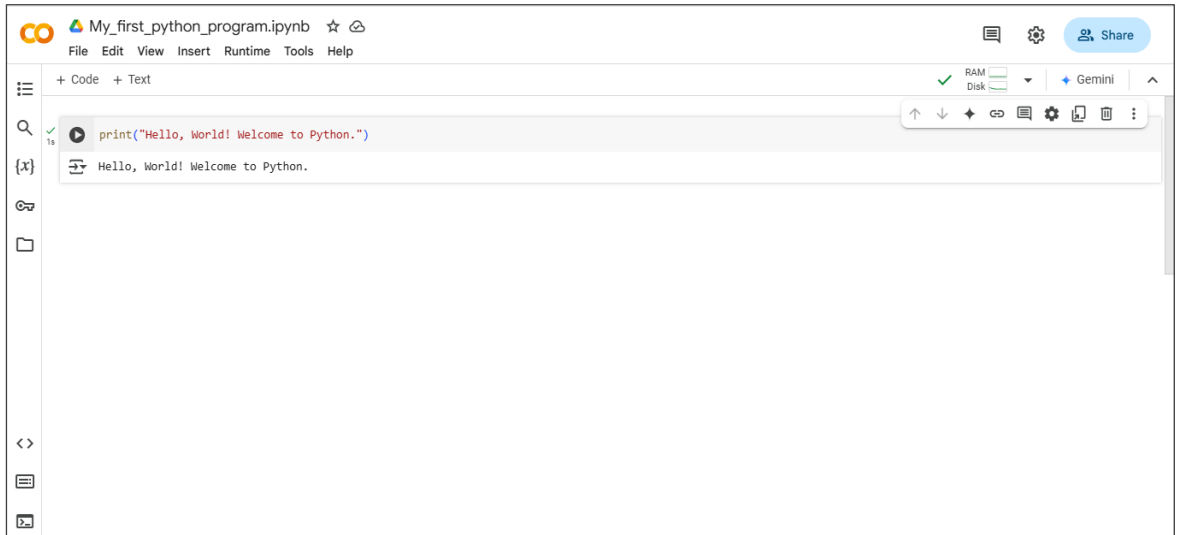


1.3 In the top left corner, rename the notebook as **My_first_python_program**

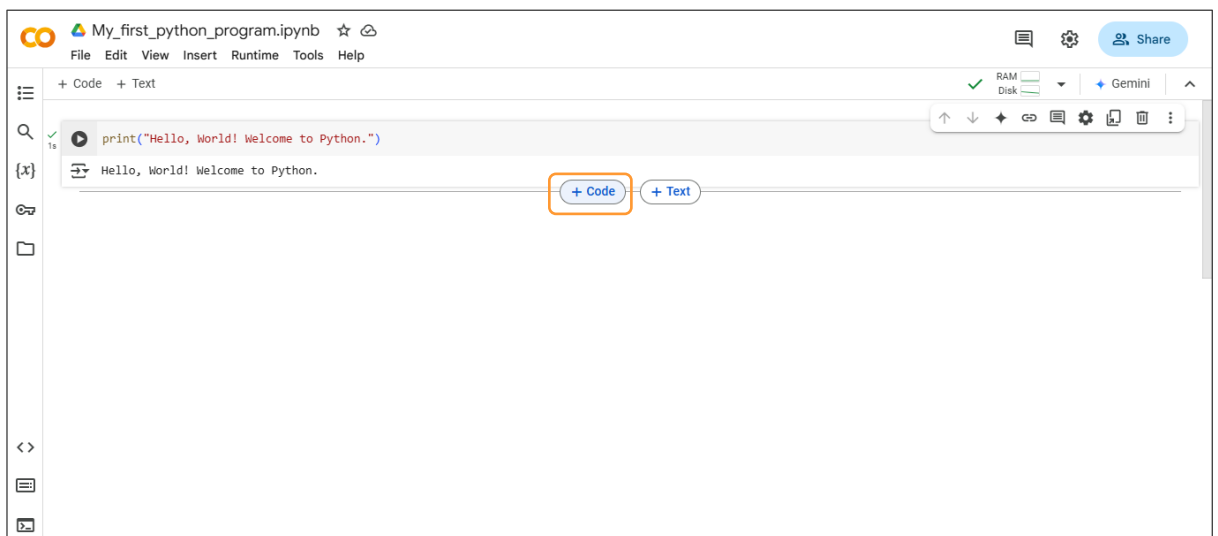


Step 2: Write and execute Python code

2.1 Write the following code to print a simple output:
print("Hello, World! Welcome to Python.")



2.2 Hover the cursor over the old cell and click on **+ Code** to add a new cell in the notebook

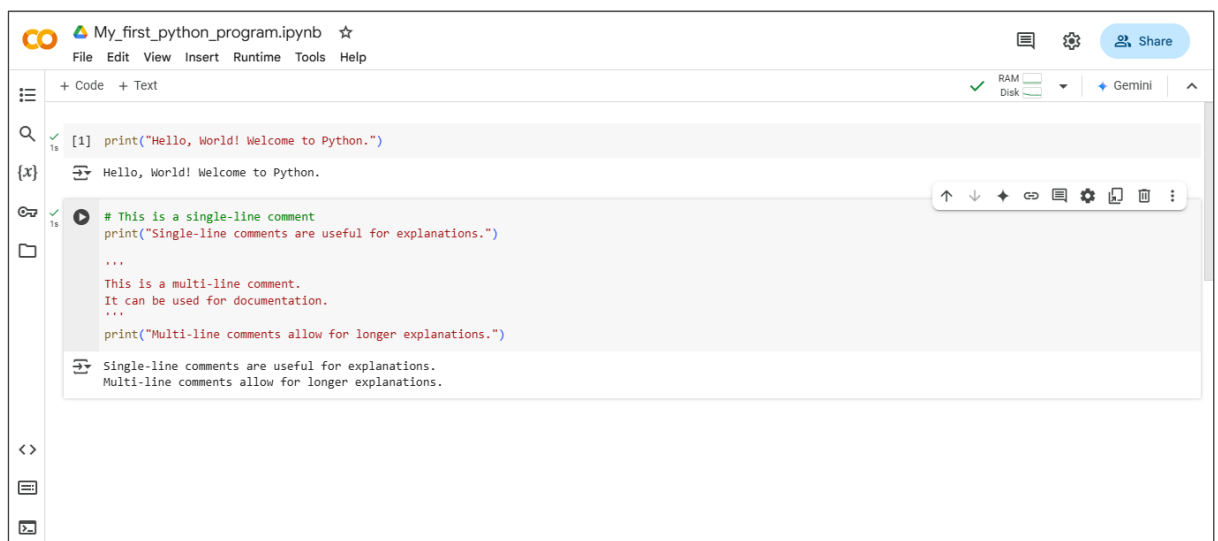


2.3 In the new cell, write the following code to see how comments work:

```
# This is a single-line comment
print("Single-line comments are useful for explanations.")

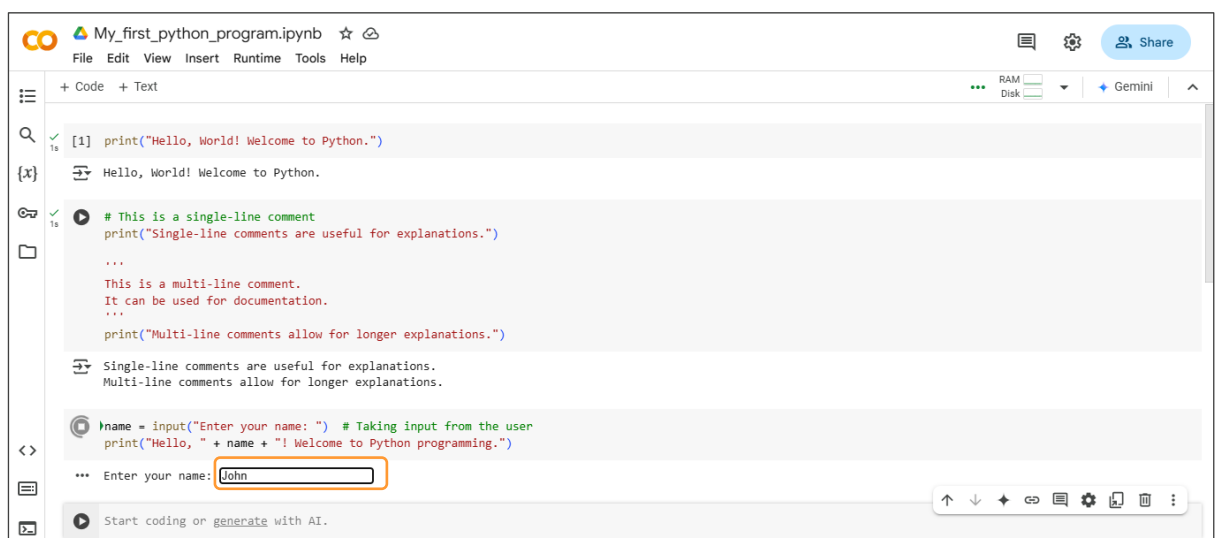
"""
This is a multi-line comment.
It can be used for documentation.
"""

print("Multi-line comments allow for longer explanations.")
```



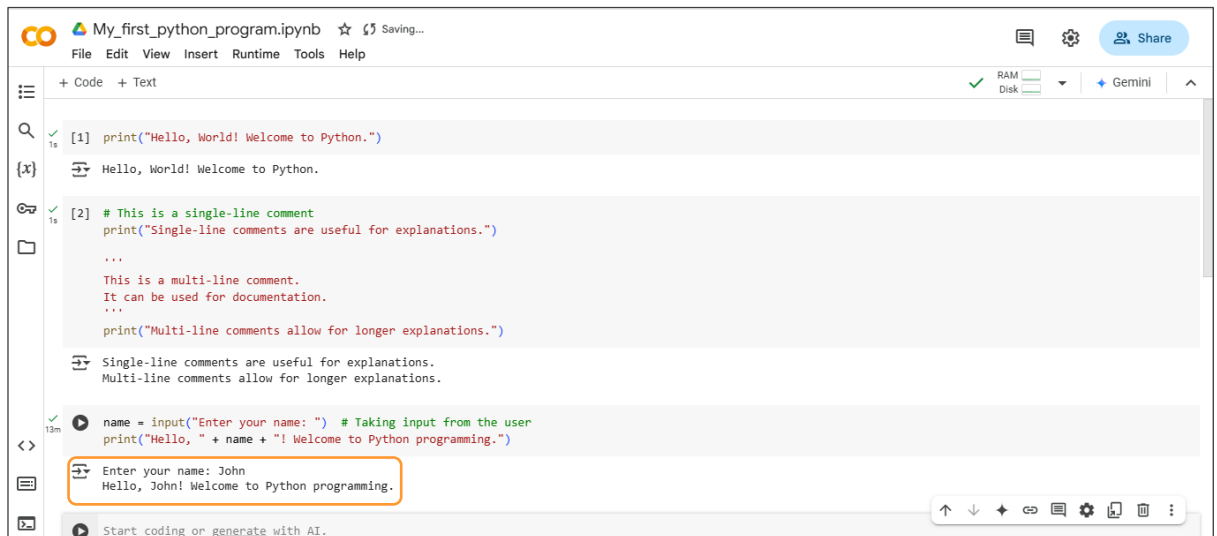
2.4 Add another new cell, write the following code for user input, and run the cell:

```
name = input("Enter your name: ") # Taking input from the user
print("Hello, " + name + "! Welcome to Python programming.")
```



Type your name inside the box when prompted.

2.5 Press enter, and you will see the following output based on your input:



The screenshot shows a Google Colab notebook titled "My_first_python_program.ipynb". The interface includes a menu bar (File, Edit, View, Insert, Runtime, Tools, Help) and a toolbar with icons for code and text input, a search icon, and a "Share" button. The notebook content is divided into three cells:

- Cell 1:** Contains a single line of Python code: `[1] print("Hello, World! Welcome to Python.")`. The output below the code is "Hello, World! Welcome to Python."
- Cell 2:** Contains Python code with comments: `[2] # This is a single-line comment`, `print("Single-line comments are useful for explanations.")`, a multi-line comment block, and `print("Multi-line comments allow for longer explanations.")`. The output shows the results of the print statements: "Single-line comments are useful for explanations." and "Multi-line comments allow for longer explanations."
- Cell 3:** Contains Python code for user input: `name = input("Enter your name: ") # Taking input from the user` and `print("Hello, " + name + "! Welcome to Python programming.")`. The input field shows "Enter your name: John" and the output shows "Hello, John! Welcome to Python programming."

The bottom of the notebook shows a status bar with "Start coding or generate with AI." and a toolbar with navigation and editing icons.

By following these steps, you have successfully written and executed Python code in Google Colab to print output, add comments, and take user input.