



# Lab 0: Introduction to Google Colab

## Getting Started with Your Python Coding Environment



**Estimated time:** 30–45 minutes



**Purpose:** Learn how to use Google Colab as the coding environment for this course

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### Learning Objectives

By the end of this lab, you will be able to:

- Open and use Google Colab
  - Understand code cells and text (Markdown) cells
  - Run Python code
  - Add and edit cells
  - Fix simple errors
  - Save and share your notebook with your instructor
- 



### What Is Google Colab?

**Google Colab** is an online platform that allows you to:


- Write and run Python code in your web browser
- Use Jupyter Notebooks without installing anything
- Save your work automatically to Google Drive

All you need is:

- A Google account
  - An internet connection
- 



### Opening Google Colab

1. Go to:  
 <https://colab.research.google.com>
2. Click **New Notebook**

A new notebook will open and you are ready to begin.

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## Understanding the Notebook Interface

A notebook is made up of **cells**.

**Types of cells you will use:**

Cell Type	Purpose
Code	Write and run Python code
Text (Markdown)	Write instructions, explanations, and notes

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## Your First Code Cell

Click inside the cell below and press **Shift + Enter**.

```
python
print("Hello from Google Colab!")
```

If the text appears below the cell, your code ran successfully.

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## Adding New Cells

You can add new cells using the buttons at the top of the notebook.

**Try this:**

1. Click + **Code**
2. In the new cell, type:

```
python
print("This is a new code cell")
```

3. Run the cell
-

## Task 1: Edit and Run Code

Modify the code below so it prints **your name**.

```
python
print("Hello, my name is ...")
```

Run the cell when you are done.

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## Text (Markdown) Cells

Markdown cells are used for:

- Writing explanations
- Answering questions
- Taking notes

**Try this:**

1. Click + **Text**
2. Type the following:

```
markdown
## My First Colab Notebook
This is my first experience using Google Colab.
```

3. Press **Shift + Enter**
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## Task 2: Create Your Own Markdown Cell

Create a **Markdown cell** that includes:

- A heading with your name
- One sentence about how you feel learning Python

Example:

```
markdown
## Ahmad Alsaadi
I am excited to learn Python this semester.
```

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## Understanding Errors

Errors are a normal part of programming.

Run the following code and observe what happens:

```
python  
print("Hello"
```

You should see an error message.

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## Fixing Errors

Now fix the code below so it runs correctly.

```
python  
print("Errors can be fixed!")
```

Run the cell after fixing it.

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## Running Cells Again

You can:

- Run cells more than once
- Run cells in any order
- Re-run a cell after making changes

Try re-running your earlier cells.

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## Saving Your Work

Google Colab automatically saves your work to Google Drive.

You do **not** need to click a save button.

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## Renaming Your Notebook

1. Click the notebook title at the top of the page
2. Rename it to:

Lab 0 Intro to Google Colab Student ID

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## Final Practice

Create a **code cell** that prints **three lines of text** describing what you learned in this lab.

Example:

```
python
print("I learned how to use Google Colab.")
print("I can run Python code.")
print("I am ready for the next lab.")
```

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## Lab 0 Complete!



Congratulations!

You have successfully learned how to use Google Colab as your programming environment.

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## Submitting Your Lab for Grading

To receive credit for this lab, you must **share your completed notebook with your instructor**.

**Follow these steps carefully:**

1. In Google Colab, click **Share** (top-right corner)
2. In the sharing window:
  - Add your instructor's email address ([ahmad.alsaadi@kaust.edu.sa](mailto:ahmad.alsaadi@kaust.edu.sa))
  - Set permission to **Editor**
3. Click **Send**



Make sure:

- Your notebook is **fully completed**
- Your notebook name is correct
- Your instructor has access