

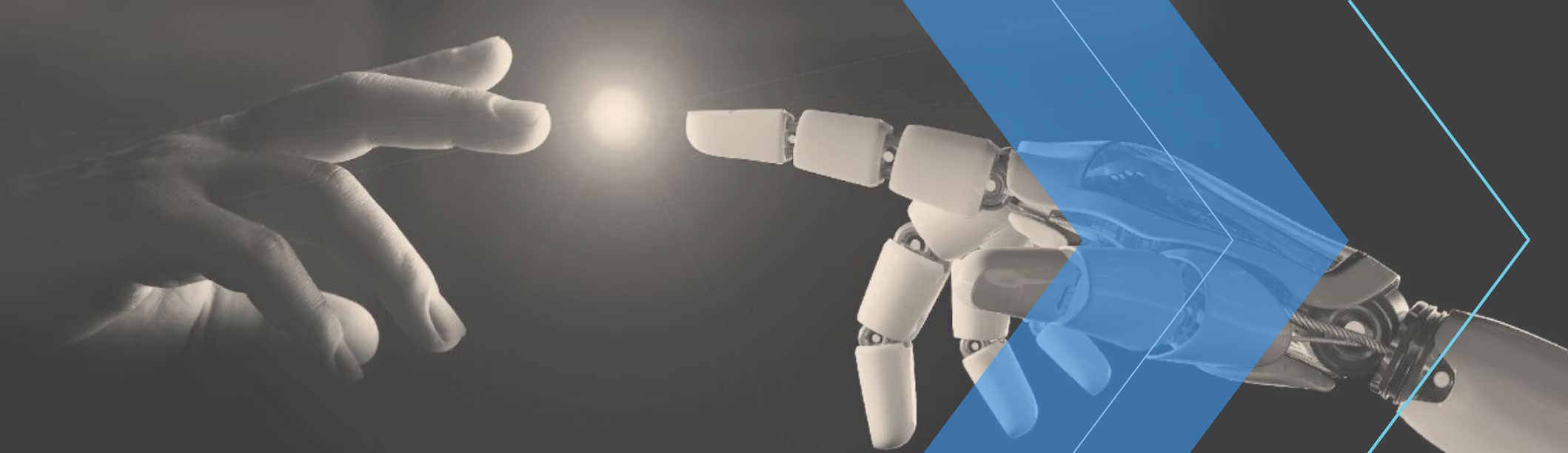
# Python

IDE, Basic Syntax, Datatype, Operators

**PRESENTED BY**  
**AI Foundation**

# 目錄

## AGENDA



**01 Python**

**02 IDE**

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**04 Variable Type**

**05 Operators**



# Python

# Which Programming Language do you want to learn?

## C

```
# include <stdio.h>

int main(void){
    printf("Hello World!")
}
```

編譯語言(Compiled language)

```
# include<iostream>
using namespace std;

int main()
{
    count << "Hello World!" << endl;
    return 0
}
```

## C++

## Java

```
class HelloWorld
{
    public static void main(String[] args)
    {
        System.out.println("Hello World!");
    }
}
```

```
print("Hello World!")
```

## Python

直譯語言(Interpreted language)

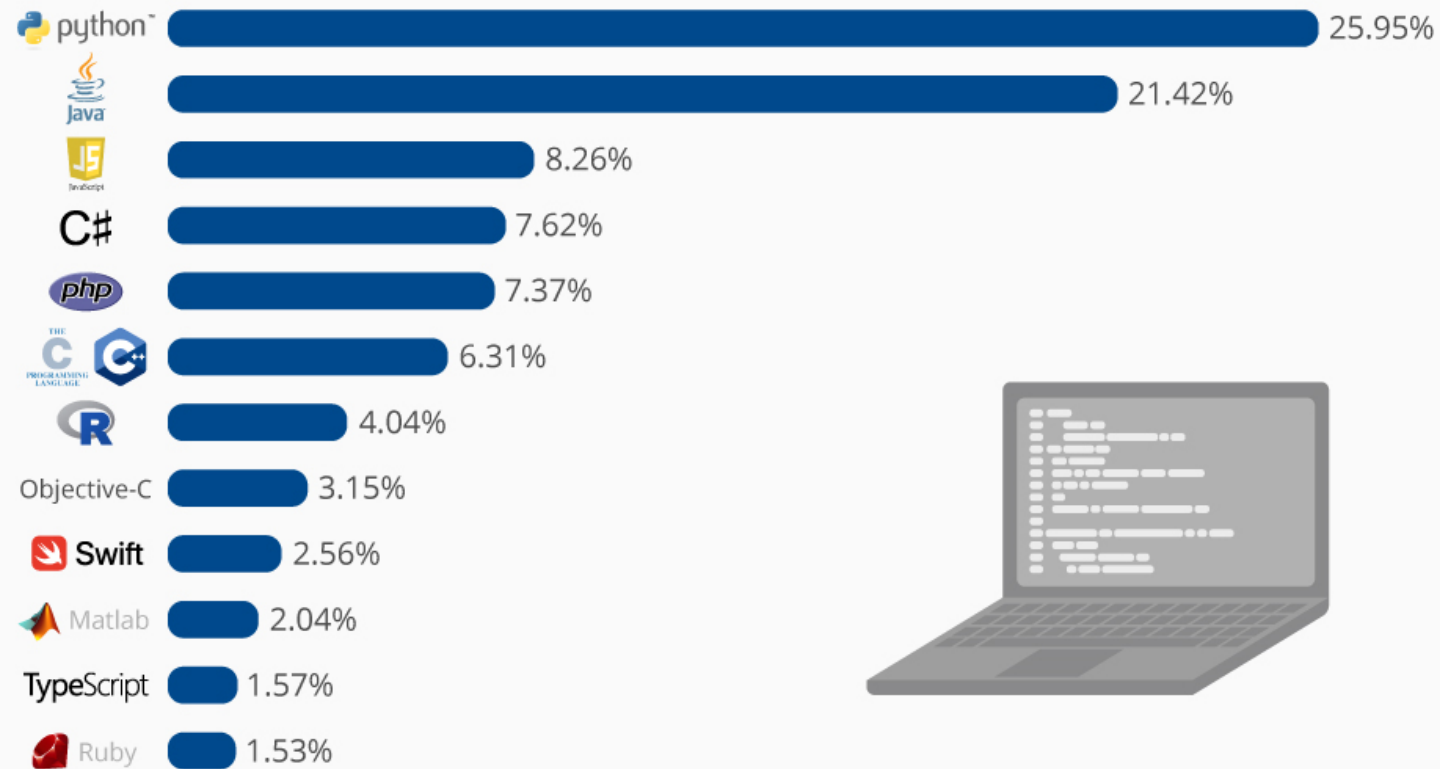
# Python packages



# The Most Popular Programming Languages

## The Most Popular Programming Languages

Share of the most popular programming languages in the world\*



@StatistaCharts

\* Based on the PYPL-Index, an analysis of Google search trends for programming language tutorials.

Source: PYPL

statista  
statista



# IDE

# IDE (Integrated Development Environment)



Visual Studio Code





# Online Platforms



Google Colaboratory

The screenshot displays the Google Colaboratory web interface. At the top, there's a header with the Colab logo, the text 'Welcome To Colaboratory', and a menu bar with options: File, Edit, View, Insert, Runtime, Tools, and Help. Below the header, there's a toolbar with '+ Code', '+ Text', 'Copy to Drive', 'Connect', and 'Editing' buttons. The main content area is titled 'Getting Started' and contains the following text:

The document you are reading is a [Jupyter notebook](#), hosted in Colaboratory. It is not a static page, but an interactive environment that lets you write and execute code in Python and other languages.

For example, here is a **code cell** with a short Python script that computes a value, stores it in a variable, and prints the result:

```
[ ] seconds_in_a_day = 24 * 60 * 60
    seconds_in_a_day
```

Below the code cell, there's a status bar showing a user icon and the number '86400'.

To execute the code in the above cell, select it with a click and then either press the play button to the left of the code, or use the keyboard shortcut "Command/Ctrl+Enter".

All cells modify the same global state, so variables that you define by executing a cell can be used in other cells:

**What types of GPUs are available in Colab?**

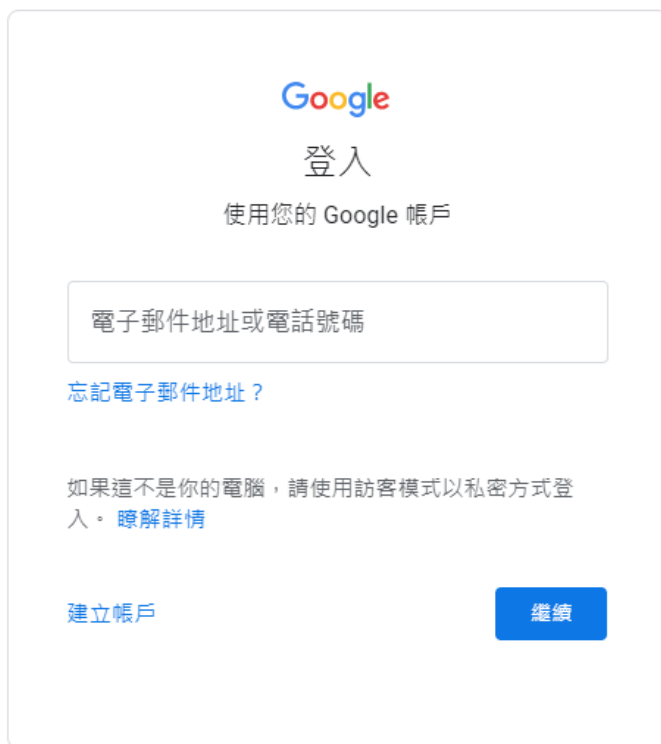
The types of GPUs that are available in Colab vary over time. This is necessary for Colab to be able to provide access to these resources for free. The GPUs available in Colab often include Nvidia K80s, T4s, P4s and P100s. There is no way to choose what type of GPU you can connect to in Colab at any given time. Users who are interested in more reliable access to Colab's fastest GPUs may be interested in [Colab Pro](#).

Note that using Colab for cryptocurrency mining is disallowed entirely, and may result in your account being restricted for use with Colab altogether.

<https://research.google.com/colaboratory/faq.html>

# How to use colab?

1. 登入Google帳戶。



The image shows the Google login interface. At the top is the Google logo, followed by the text '登入' (Sign in) and '使用您的 Google 帳戶' (Use your Google account). Below this is a text input field with the placeholder '電子郵件地址或電話號碼' (Email address or phone number). Under the input field is a link '忘記電子郵件地址?' (Forgot email address?). Further down is a line of text: '如果這不是你的電腦，請使用訪客模式以私密方式登入。' (If this isn't your computer, sign in as a guest to browse privately.) followed by a link '瞭解詳情' (Learn more). At the bottom left is a link '建立帳戶' (Create account) and at the bottom right is a blue button labeled '繼續' (Continue).

2. 進入任意colab頁面。



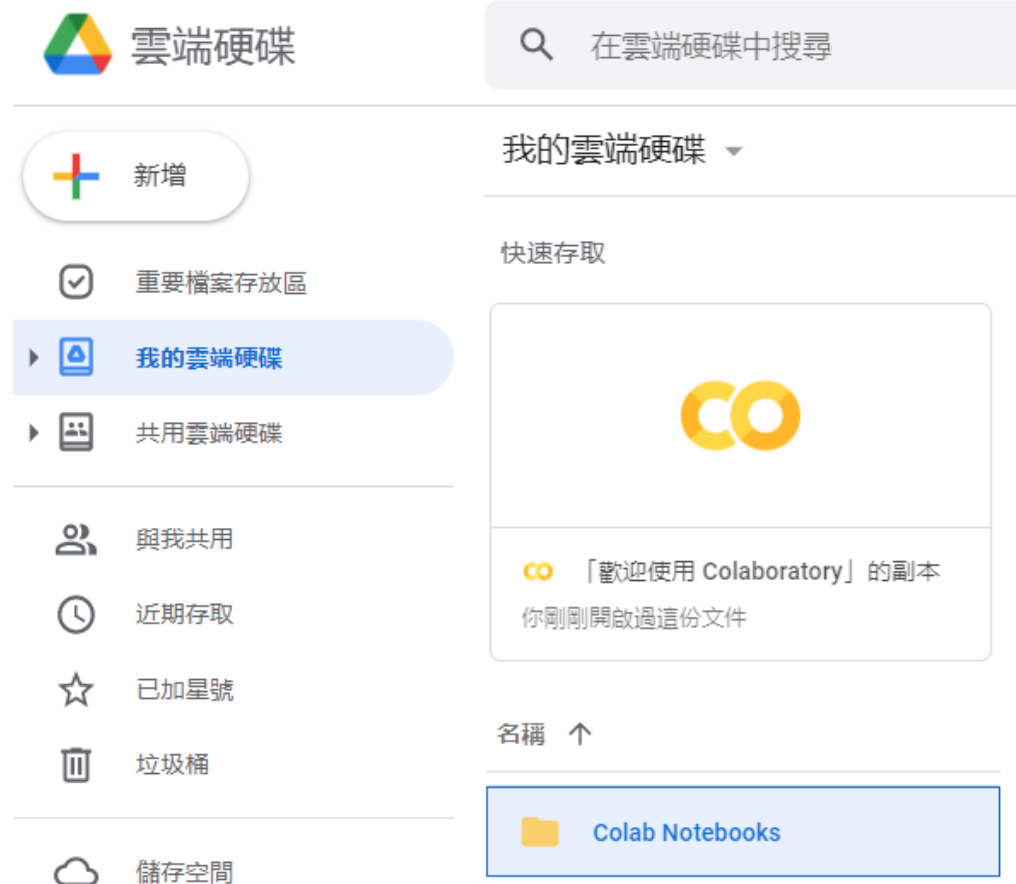
# How to use colab?

3. 進入的頁面即是可以撰寫Python的環境(記事本 Notebook) ,  
點選選單列的“ 檔案” > “ 新增筆記本” , 或 “ 在雲端硬碟中儲存複本” 。



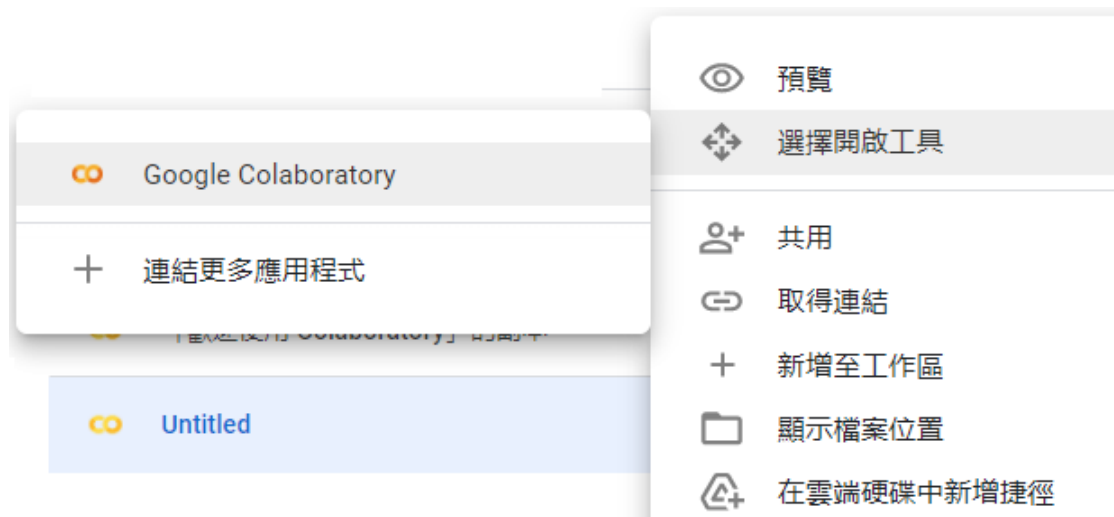
# How to use colab?

4. 新增的筆記本會自動存於你的google雲端硬碟中，  
開啟[雲端硬碟](#)頁面，進到我的雲端硬碟，  
可以看到已經自動建立  
Colab Notebooks資料夾。



# How to use colab?

5. 進到資料夾中可以看到剛才建立的檔案，  
點兩下 或 右鍵>選擇開啟工具>Google Colaboratory 開啟檔案



6. 可以在線上編寫程式啦~

