

# Lab051 : Python Inheritance

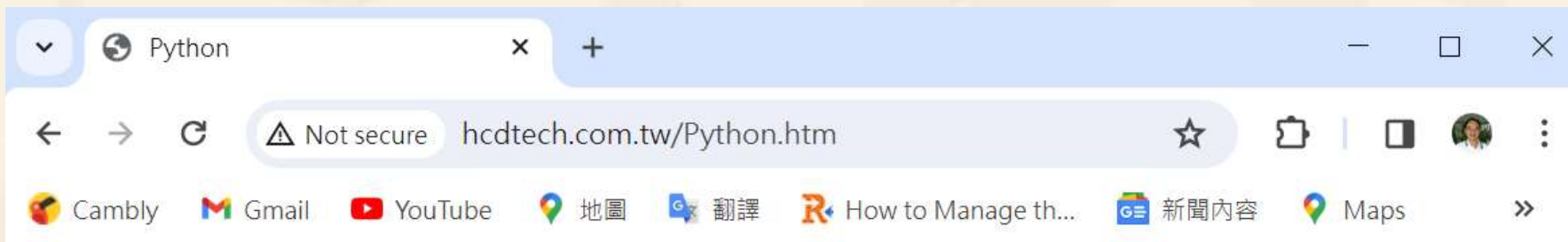
## Python繼承

(別怕! 跟著做你就會!)

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請至 [www.hcdtech.com.tw](http://www.hcdtech.com.tw) 下載教材



<http://www.hcdtech.com.tw/Python.htm>



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所有的考卷都可以考100分，是我們自己錯過了！

## 學習秘訣=發問+練習

考卷發下去，時間到了收回來，如果沒有考到100分，這很正常。重點來了，不會的可以問，問完了練習，準備好了考卷再發下去。第二次還是沒有考到100分，這也很正常。沒關係，再來一次，不會的可以問，問完了練習，準備好了考卷第三次再發下去，.....，考到第N次如果還是沒有考到100分。沒關係，再來，不會的可以問，問完了練習，N+1次、N+2次、.....，你們都很聰明，知道我在說什麼，到最後考卷一定可以考100分！看懂了妳/你就會知道，原來學習的秘訣就是發問和練習！今天開始不懂就問，問完了練習，明年的妳/你肯定不一樣！



# 學習如何學習！

1

1 2

1 2 3

.....

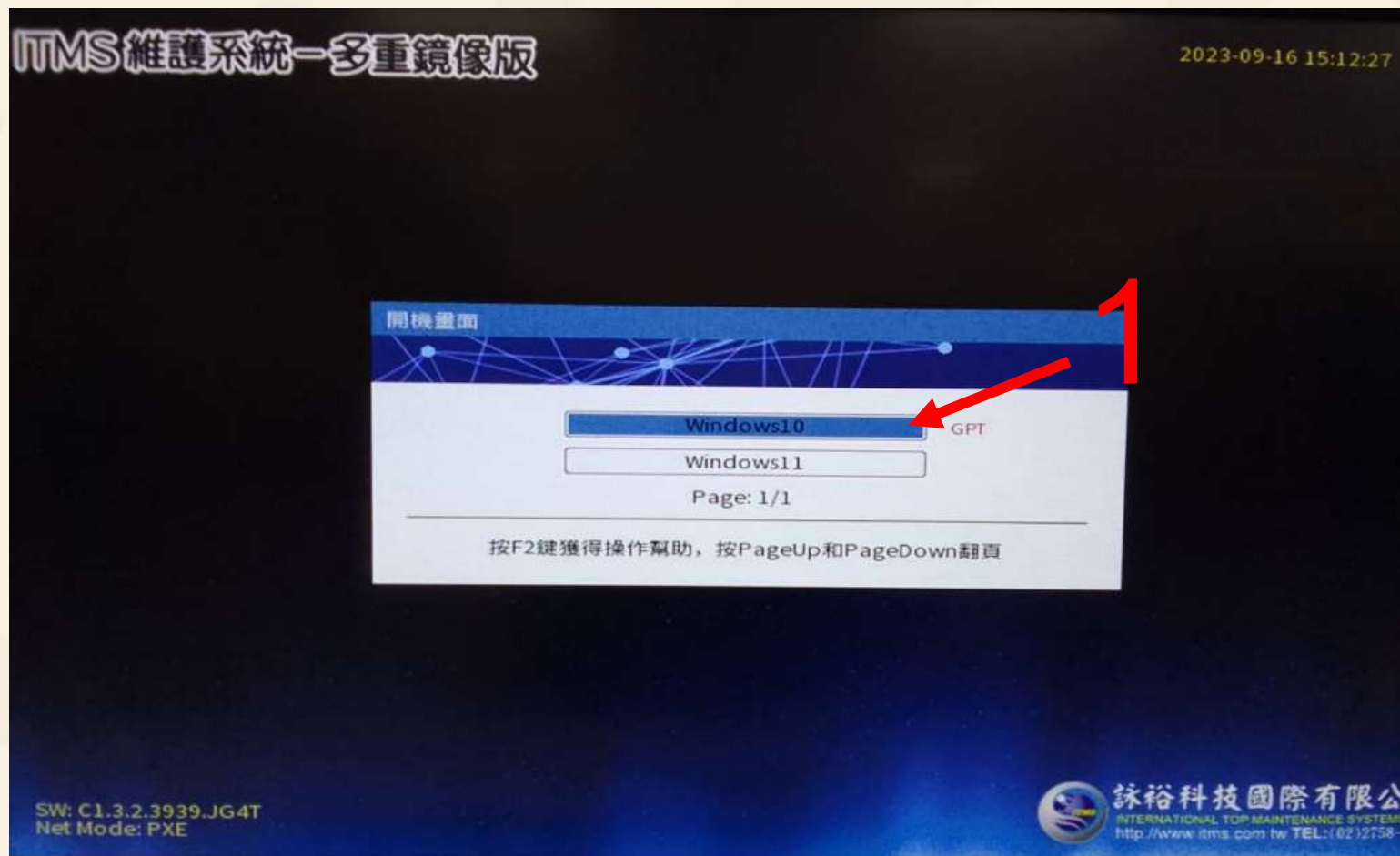
1 2 3 4 5 6 7 8 9 10

## 金字塔念書法



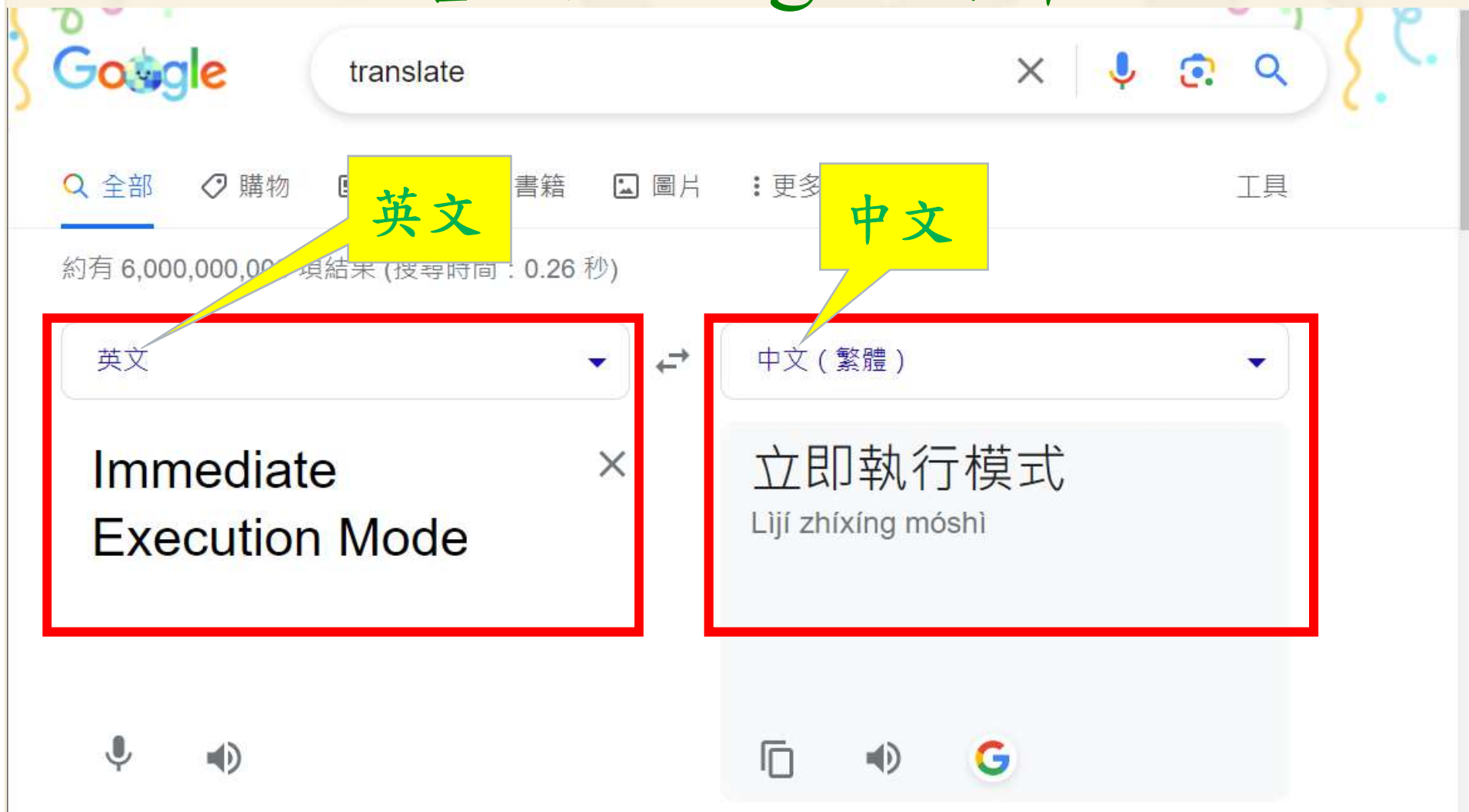
如果一本書有10個章節！先看第1章，在看第2章之前再把第1章看一遍，在看第3章之前再把第1, 2章看一遍，.....，等看到第10章的時候，第1, 2, 3, 4章恐怕已經背起來了！我稱這種念書法為金字塔念書法，今天開始照著做，明年的妳/你肯定不一樣！

# 請使用 Windows 10



## 1. 選用 Windows 10.

# 善用 Google 翻譯





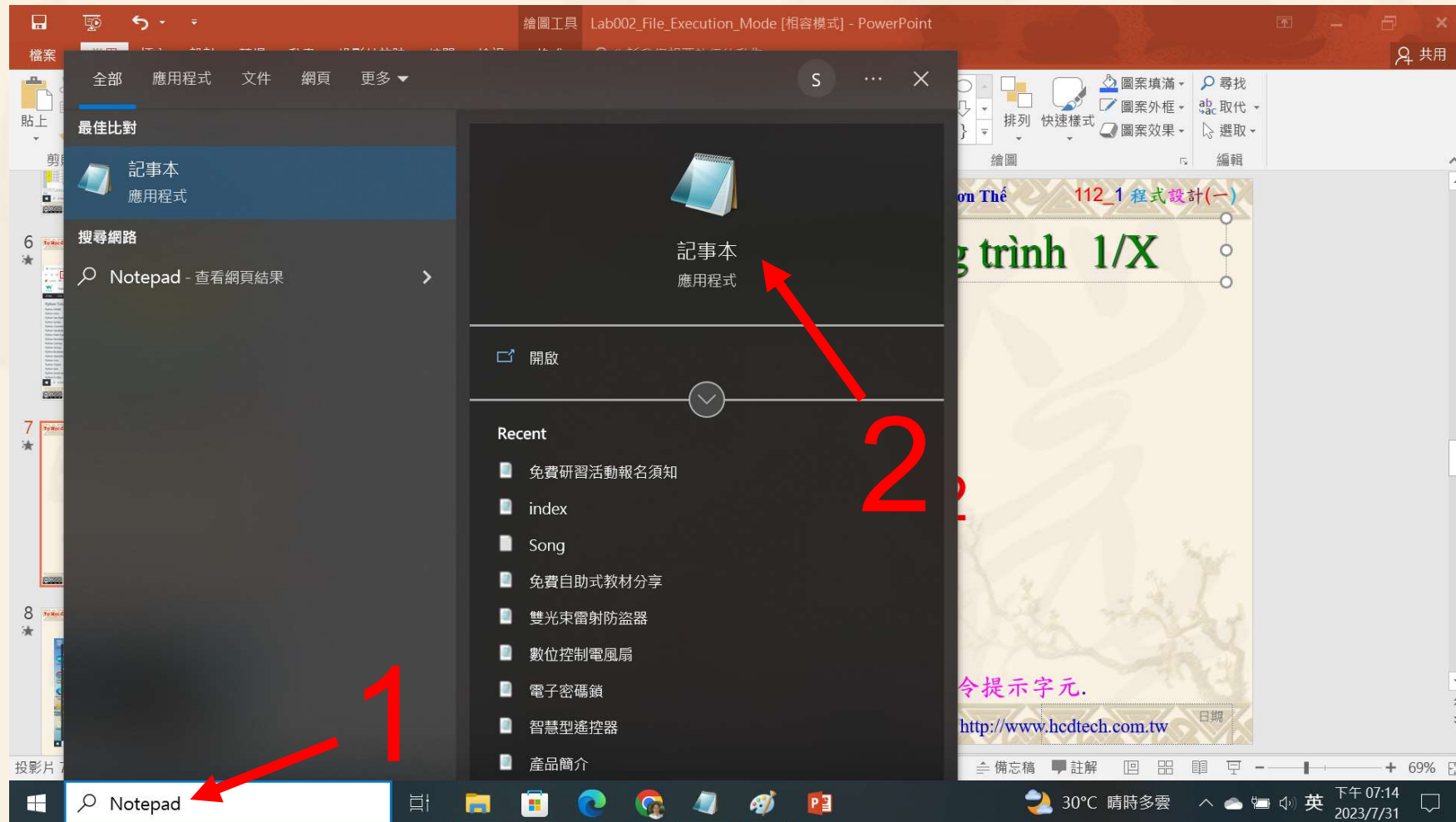
# 請先開啟網頁閱讀

The screenshot shows a web browser window with the following elements:

- Address Bar:** The URL `w3schools.com/python/python_inheritance.asp` is highlighted with a red box.
- Navigation Bar:** Includes 'w3schools' logo, 'Tutorials', 'Exercises', 'Certificates', 'Services', 'Spaces', 'Get Certified', 'Sign Up', and 'Log in'.
- Menu:** A list of Python topics including 'Python Booleans', 'Python Operators', 'Python Lists', 'Python Tuples', 'Python Sets', 'Python Dictionaries', 'Python If...Else', 'Python While Loops', 'Python For Loops', 'Python Functions', 'Python Lambda', 'Python Arrays', 'Python Classes/Objects', 'Python Inheritance' (highlighted), 'Python Iterators', 'Python Polymorphism', 'Python Scope', 'Python Modules', and 'Python Dates'.
- Main Content:**
  - Header: 'Python Inheritance'
  - Buttons: '< Previous' and 'Next >'
  - Text: 'Inheritance allows us to define a class that inherits all the methods and properties from another class.'
  - Text: '**Parent class** is the class being inherited from, also called base class.'
  - Text: '**Child class** is the class that inherits from another class, also called derived class.'
- Advertisement:** A banner for Microsoft 365 with the text 'BUILD YOUR CAREER. GET FULL ACCESS. SAVE 770\$' and a 'Start today' button.
- Taskbar:** Shows the Windows taskbar with search, task view, and various application icons. The system tray shows '24°C 多雲時陰' and the date '2023/10/22'.

請用善用 Google 翻譯 讀懂 網頁 內容

# 建立程式文件 1/4



1. 鍵盤輸入 Notepad. 2. 用滑鼠點選記事本.



# 建立程式文件 2/4

```

P11211XXX - 記事本
檔案(F) 編輯(E) 格式(O) 檢視(V) 說明
print("P11211XXX practices Lab051.")

#Create a parent class named Parent, with firstname, lastname,
#and student_ID properties, and a printname method:
class Parent:
    def __init__(self, fname, lname, stID):
        self.firstname = fname
        self.lastname = lname
        self.st_ID = stID

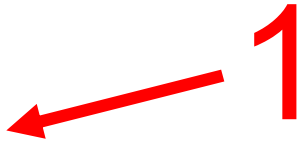
    def printname(self):
        print(self.firstname, self.lastname, self.st_ID)

#Use the Parent class to create an object, and then execute the printname method:
x = Parent("Lisa", "Chu", "P11211XXX")
x.printname()

#Create a child class named Child, which will inherit the properties
#and methods from the Parent class:
class Child(Parent):
    pass

#Now the Child class has the same properties and methods as the Parent class.
#Use the Child class to create an object, and then execute the printname method:
x = Child("Mary", "Yang", "P11211XXX")
x.printname()
    
```

Replace P11211XXX with your student ID

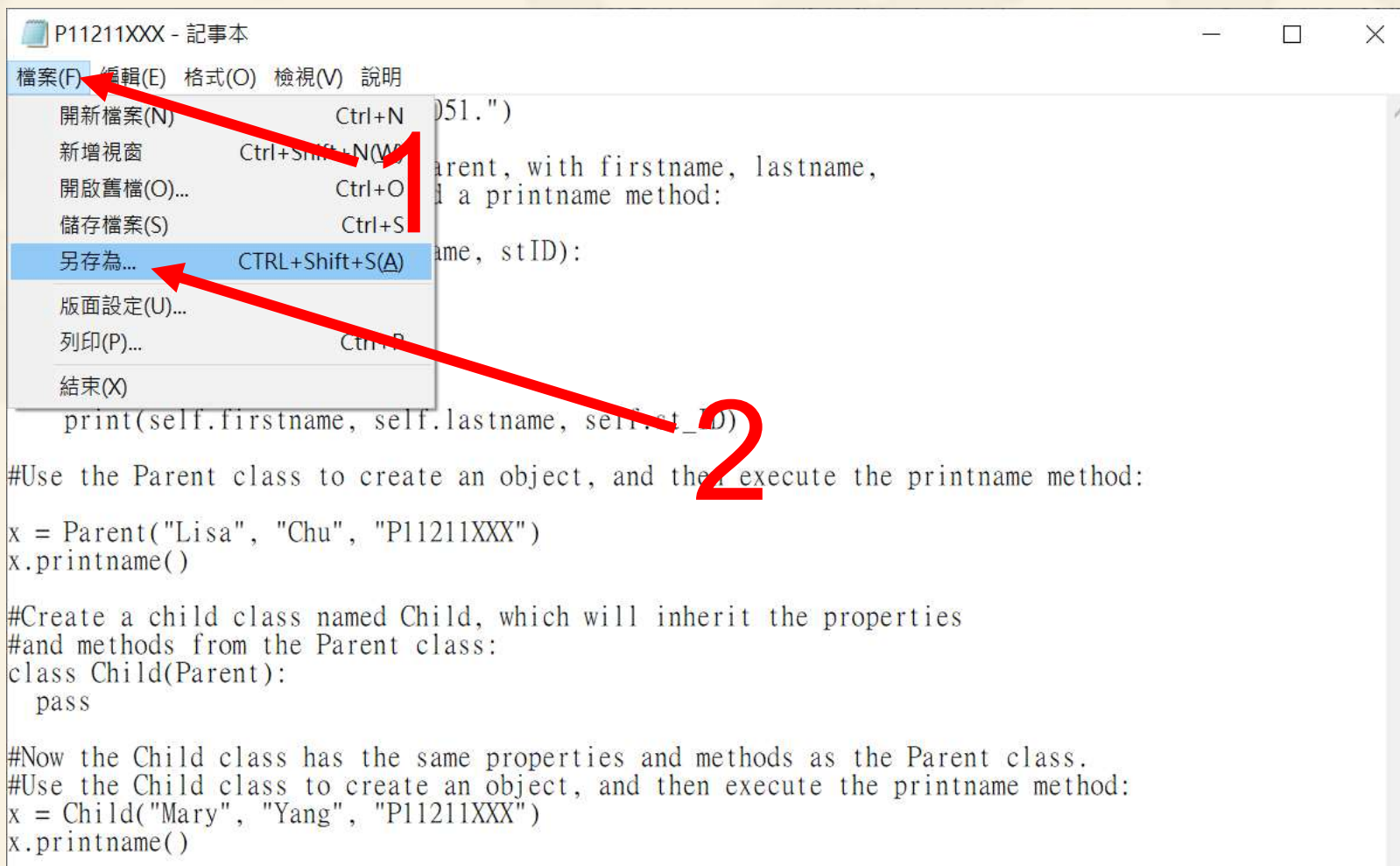


Replace P11211XXX with your student ID

Replace P11211XXX with your student ID

1. 用鍵盤輸入程式代碼。

# 建立程式文件 3/4



1. 用滑鼠點選檔案. 2. 用滑鼠點選另存為....

# 建立程式文件 4/4

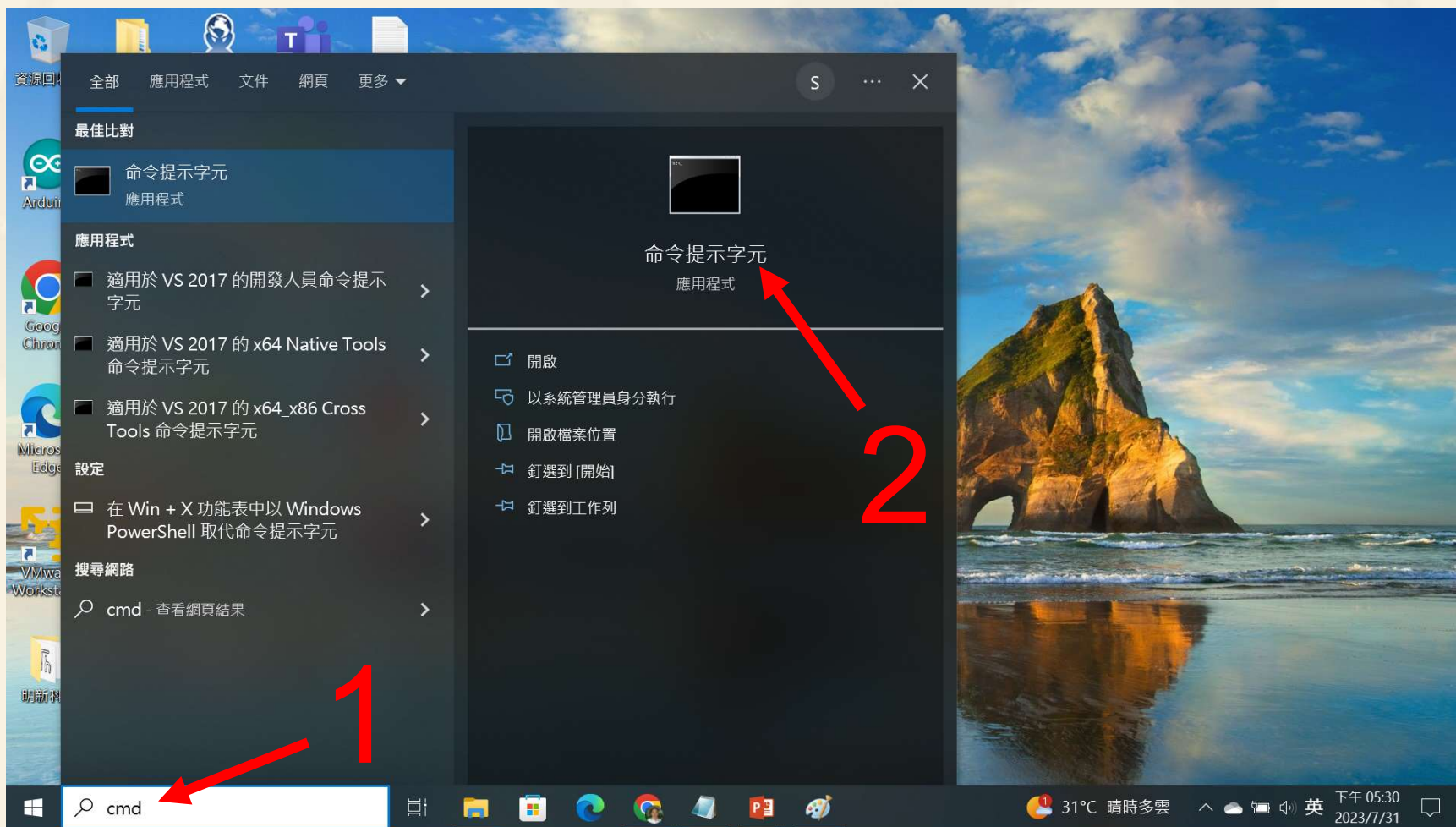


Replace P11211XXX with your student ID

1. 資料夾 = C:\使用者>User>.
2. 檔案名稱 = P11211XXX.py .
3. 存檔類型(T) = 所有檔案.
4. 用滑鼠點選存檔.



# 檔案執行模式 1/2



1. 鍵盤輸入 cmd. 2. 用滑鼠點選命令提示字元.

# 檔案執行模式 2/2

命令提示字元

```
Microsoft Windows [版本 10.0.19045.3324]  
(c) Microsoft Corporation. 著作權所有，並保留一切權利。  
C:\Users\User>Python P11211XXX.py
```

Replace P11211XXX with your student ID

1

2

1. 鍵盤輸入 Python P11211XXX.py.
2. 按一下 Enter.

# Verification Criteria of Lab051 (Lab051的驗收規範) Python繼承

**P11211XXX 必需  
更換為您的學號**

```

命令提示字元
Microsoft Windows [版本 10.0.19045.3570]
(c) Microsoft Corporation. 著作權所有，並保留一切權利。
C:\Users\User>Python P11211XXX.py
P11211XXX practices Lab051.
Lisa Chu P11211XXX
Mary Yang P11211XXX
C:\Users\User>

```

```

P11211XXX - 記事本
檔案(F) 編輯(E) 格式(O) 檢視(V) 說明
print("P11211XXX practices Lab051.")

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    def __init__(self, fname, lname, stID):
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        self.lastname = lname
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    def printname(self):
        print(self.firstname, self.lastname, self.st_ID)

#Use the Parent class to create an object, and then execute the printname method:
x = Parent("Lisa", "Chu", "P11211XXX")
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#and methods from the Parent class:
class Child(Parent):
    pass

#Now the Child class has the same properties and methods as the Parent class.
#Use the Child class to create an object, and then execute the printname method:
x = Child("Mary", "Yang", "P11211XXX")
x.printname()

```

Ask the teacher to give you points after completing the illustrated results.

(完成右圖指定成果後請教師在您的座位驗收並讓您簽名加分)

**Every student must do Lab051 once!  
(每一位學生至少都要用自己的電腦做一次 Lab051!)**



# 養成良好的工作態度

- 離開實驗室時請整理自己的工作座位，為自己的工作態度加分：
  - (1)滑鼠鍵盤歸位 (2)電腦關機 (3)螢幕關閉電源 (4)椅背靠妥 (5)個人責任區(工作座位及週邊範圍)應整潔，不遺留垃圾紙屑等。

