HW #1

Multivariable Regression

Regression Using Sklearn

Dataset – Concrete Compressive Strength (水泥構件抗壓強度)

■ **Abstract**

- Concrete is an important material in civil engineering.
- The concrete compressive strength is a highly nonlinear function of age and ingredients.

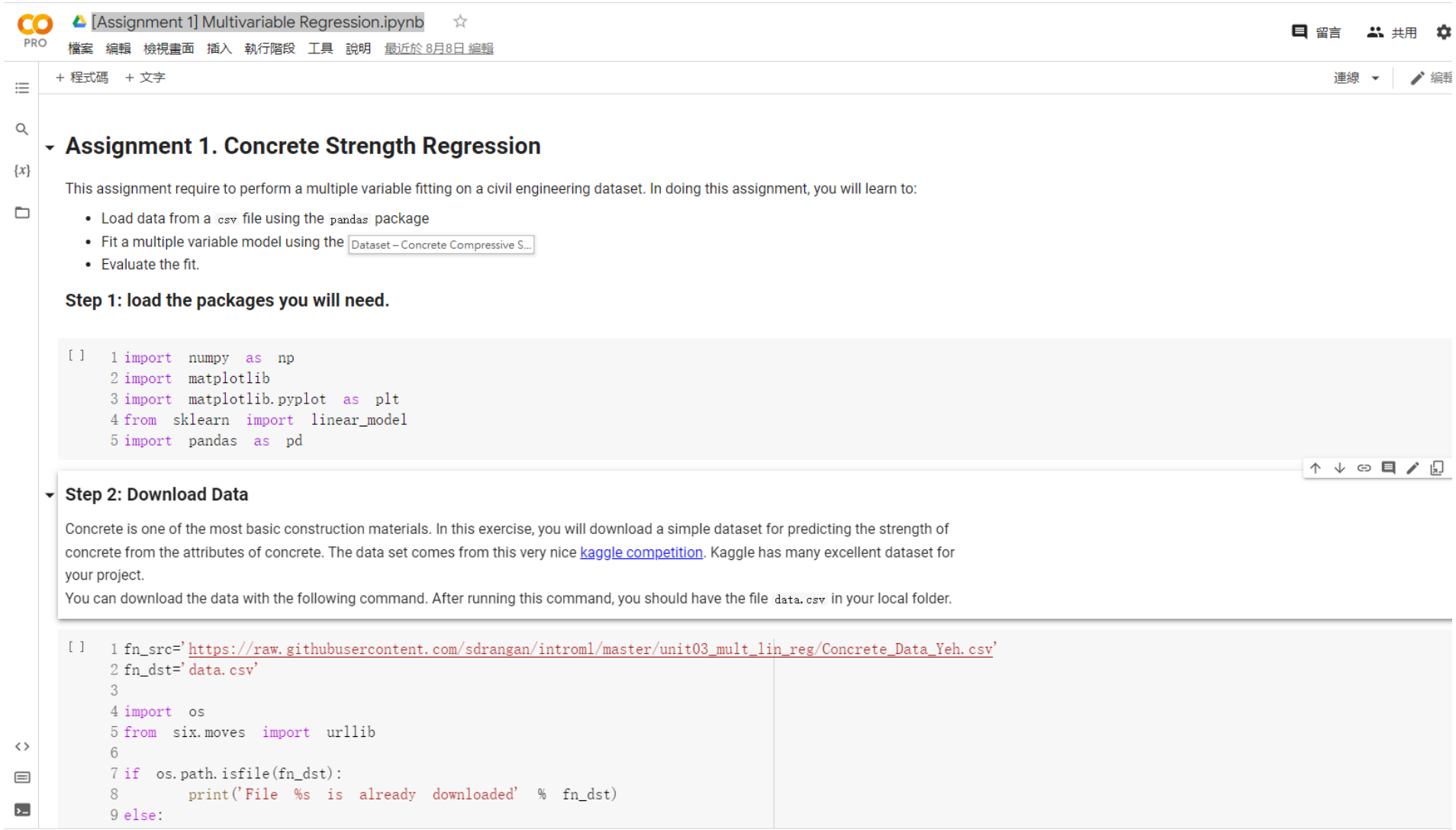
■ **Data Set Information**:

- Number of instances/samples: 1030
- Number of variables: 9 (8 input variables, and 1 output variable)

Dataset – Concrete Compressive Strength (水泥構件抗壓強度)

Name	Data Type	Measurement	Description
Cement/水泥 (component 1)	Quantitative	kg in a m^3 mixture	Input Variable
Blast Furnace Slag/高爐渣(component 2)	Quantitative	kg in a m^3 mixture	Input Variable
Fly Ash/飛灰(component 3)	Quantitative	kg in a m^3 mixture	Input Variable
Water/水 (component 4)	Quantitative	kg in a m^3 mixture	Input Variable
Superplasticizer/減水劑 (component 5)	Quantitative	kg in a m^3 mixture	Input Variable
Coarse Aggregate/粗粒料(component 6)	Quantitative	kg in a m^3 mixture	Input Variable
Fine Aggregate/細粒料(component 7)	Quantitative	kg in a m^3 mixture	Input Variable
Age/年分	Quantitative	Day (1~365)	Input Variable
Concrete compressive strength (抗壓強度)	Quantitative	MPa (Million Pa)	Output Variable

Code Template [HW1 Template] Multivariable Regression.ipynb



作業要求

- ■學習與理解Step1-Step4
- ■完成Step5-Step9
- ■上傳資料: 程式碼、報告
- ■繳交作業報告

評分方式:**報告書與作業內容理解(100%)**