

# Junior Data Engineer Challenge

## Scenario:

The screenshot shows the official portal of the Federal Agricultural Marketing Authority (FAMA). The header includes the FAMA logo, the text 'Official Portal FEDERAL AGRICULTURAL MARKETING AUTHORITY Ministry of Agriculture and Food Industry', and navigation links for FAQ, Contact Us, Complaint & Feedback, Sitemap, and language options (EN, MS). A search bar is located on the right. The main content area is divided into 'PUBLIC' and 'LATEST MARKET PRICES'. Under 'PUBLIC', there is a list of links including Agromas, Publications, Download, Journal of Agribusiness Marketing, Marketing Information, Latest Market Prices, Training Institute Port Dickson, Training Institute Kelantan, FAMA e-Services, Tender & Quotation, News & Events, Job Vacancies, and Fama Website Survey. The 'LATEST MARKET PRICES' section contains three links: Farm Price, Wholesale Price, and Retail Price. The footer includes links for Terms & Conditions, Privacy Policy, Security Policy, and Disclaimer, along with a copyright notice for 2022 and social media icons.

- Your assignment is to write a program to scrape the latest market prices from the website <https://www.fama.gov.my/en/harga-pasaran-terkini>.
- From the website, there are 3 links to a set of market prices:
  - the Farm Price
  - the Wholesale Price
  - the Retail Price
- Your goal is to scrape the prices here and combine them together into a single table. The table shall be exported to a .CSV file.
- The .CSV file should fulfil the following requirements:
  - Contains the following headers: Market Price Type, Centre, Variety Name, Grade, Unit, Max, Price, Average Price, Min. Price
  - All mentions of the word 'KILOGRAM' should be converted to 'KG'
- Here is an example of how . CSV file contents should look like:

Market Price Type	Centre	Variety Name	Grade	Unit	Max Price	Average Price	Min. Price
Farm Price	"KUANTAN, PAHANG"	AYAM HIDUP	F.A.Q	100 KG	560.00	550.00	500.00
Wholesale Price	"KUCHING, SARAWAK"	KELAPA DIKUPAS	SEDANG	100 BIJI	120.00	110.00	100.00
Retail Price	"LABUAN, W.P. LABUAN"	BAYAM	F.A.Q	KG	5.00	5.00	5.00

- You are free to use any libraries in order to achieve this goal but your script must be written using Python 3 and any libraries that you use must be included in your requirements.txt
- You will be given 1 week to complete this assignment

## Expected output:

- PEP 8 compliant python code
- Code is neat, has a logical flow and is well documented
- A .CSV file containing the scraped output that fulfil the requirements
- If selected, you may be required to give a brief, live demo of your code and be prepared to answer some technical questions related to it

## Requirements:

- Assignment code available on personal github repo
- Assignment must be done using Python 3 only
- Provided script must be executable
- Include requirements.txt