**Libraries and Setup:** The code uses the **requests** library to fetch data from an external API and **dash** along with its components to build the web dashboard.

### 1. API Request Function:

- The function fetch\_exchange\_rates reach out to an API hosted on RapidAPI to get the current exchange rates with the Indian Rupee (INR) as the base currency.
- The API returns data in JSON format, which includes various currencies and their equivalent value in INR.

## 2. Dash App Initialization:

• A new Dash app is initialized. Dash is a framework for building interactive web applications purely in Python.

## 3. Dashboard Layout:

- The layout of the app includes a title (**Exchange Rates Dashboard**), a dropdown menu for selecting a currency, and a display area where the exchange rate is shown.
- The dropdown is populated with currencies fetched from the API. It allows the user to select which currency they want to see the exchange rate for.

#### 4. Interactive Update Feature:

- A callback function updates the display area based on the user's selection in the dropdown.
- When a currency is selected, the app displays how much 1 INR is worth in the chosen currency.

#### 5. Server and Debugging:

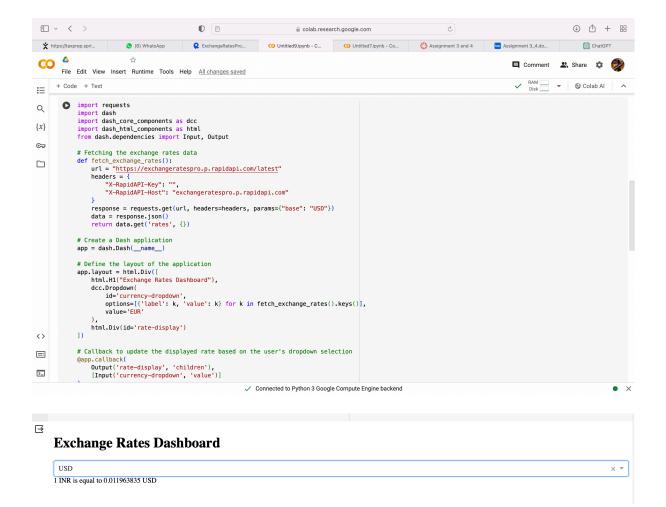
 The app.run\_server(debug=True) line starts the web server to serve the Dash app. The debug=True parameter allows the app to automatically reload during development when changes are made to the code.

```
import requests

url = "https://exchangeratespro.p.rapidapi.com/latest"
querystring = {"base":"USD"}
headers = {
    "X-RapidAPI-Key": "4b808134d4msh93ba78a1408db9bp16d163jsnd3939bab5190",
    "X-RapidAPI-Host": "exchangeratespro.p.rapidapi.com"
}
response = requests.get(url, headers=headers, params=querystring)
print(response.json())

isy=policy', 'timestamp': 1713325440, 'date': '2024-04-17103:44:00.0002', 'base': 'USD', 'rates': {'ADA': 2.1798806194, 'AED': 3.6712204041, 'AFN': 72.265492}

Paguirement already satisfied: dash in /usr/local/lib/python3.10/dist-packages (2.16.1)
Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (2.31.0)
Requirement already satisfied: Flask<3.1,>=1.0.4 in /usr/local/lib/python3.10/dist-packages (from da Requirement already satisfied: plotly>=5.0.0 in /usr/local/lib/python3.10/dist-packages (from da Requi
```



 $\Box$ 

# **Exchange Rates Dashboard**

**CVE** 

1 INR is equal to 1.240873762 CVE

