Question 4 - Write a program to download the data from the link given below and then read the data and convert the into the proper structure and return it as a CSV file.

Link - https://data.nasa.gov/resource/y77d-th95.json

Note - Write code comments wherever needed for code understanding.

Excepted Output Data Attributes

● Name of Earth Meteorite - string id - ID of Earth

● Meteorite - int nametype - string recclass - string

● mass - Mass of Earth Meteorite - float year - Year at which Earth

● Meteorite was hit - datetime format reclat - float recclong - float

● point coordinates - list of int

Ans:

In [2]:
```
import requests
import json
import csv
```

In [3]:
```
def download_data(url):
    response = requests.get(url)
    data = response.json()
    return data

def convert_to_csv(data):
    attributes = ['name', 'id', 'nametype', 'recclass', 'mass (g)', 'year', 'reclat', 'reclong', 'coordinates']

    with open('meteorite_data.csv', 'w', newline='', encoding='utf-8') as csvfile:
        writer = csv.writer(csvfile)
        writer.writerow(attributes)

        for meteorite in data:
            row = [
                meteorite.get('name', ''),
                meteorite.get('id', ''),
                meteorite.get('nametype', ''),
                meteorite.get('recclass', ''),
                meteorite.get('mass (g)', ''),
                meteorite.get('year', ''),
                meteorite.get('reclat', ''),
                meteorite.get('reclong', ''),
                meteorite.get('geolocation', {}).get('coordinates', [])
            ]
            writer.writerow(row)

    print("CSV file generated successfully!")

# Provide the URL to download the data from
url = "https://data.nasa.gov/resource/y77d-th95.json"

# Download the data
data = download_data(url)

# Convert and save the data as a CSV file
convert_to_csv(data)
```

```
CSV file generated successfully!
```

In [ ]: