Question 3:- Write a program, which would download the data from the provided link, and then read the data and convert that into properly structured data and return it in Excel format.

Note - Write comments wherever necessary explaining the code written.

Link - https://raw.githubusercontent.com/Biuni/PokemonGO-Pokedex/master/pokedex.json

Data Attributes - id: Identification Number - int num: Number of the

● Pokémon in the official Pokédex - int name: Pokémon name -

● string img: URL to an image of this Pokémon - string type:

● Pokémon type -string height: Pokémon height - float

● weight: Pokémon weight - float candy: type of candy used to evolve Pokémon or given

● when transferred - string candy_count: the amount of candies required to evolve

- int
-

● egg: Number of kilometers to travel to hatch the egg - float spawn_chance:

● Percentage of spawn chance (NEW) - float avg_spawns: Number of this pokemon on 10.000 spawns (NEW) - int

● spawn_time: Spawns most active at the time on this field. Spawn times are the same for all time zones and are expressed in local time. (NEW) - “minutes: seconds” multipliers:

Multiplier of Combat Power (CP) for calculating the CP after evolution See below - list of int weakness: Types of

● Pokémon this Pokémon is weak to - list of strings next_evolution: Number and Name of successive evolutions of Pokémon - list of dict prev_evolution: Number and Name of previous evolutions of Pokémon - - list of dict

Ans:

In [1]:
```
import requests
import pandas as pd
```

In [2]:
```
# Retrieve the raw JSON data

def json_to_csv(link):
    response = requests.get(link)
    data = response.json()["pokemon"]

    # Convert JSON data to DataFrame
    df = pd.DataFrame(data)

    df.to_csv("Output.csv", index=False)
```

In [3]:
```
link = "https://raw.githubusercontent.com/Biuni/PokemonGO-Pokedex/master/pokedex.json"
json_to_csv(link)
```

In [11]:
```
df1 = pd.read_csv("Output.csv")
df1.to_excel(r"C:\Users\hrush\Downloads\convert.xlsx")
```

In [12]:
```
df1
```

Out[12]:

	id	num	name	img	type	height	weight	candy	candy_count	egg	spaw
0	1	1	Bulbasaur	http://www.serebii.net/pokemongo/pokemon/001.png	['Grass', 'Poison']	0.71 m	6.9 kg	Bulbasaur Candy	25.0	2 km	
1	2	2	Ivysaur	http://www.serebii.net/pokemongo/pokemon/002.png	['Grass', 'Poison']	0.99 m	13.0 kg	Bulbasaur Candy	100.0	Not in Eggs	
2	3	3	Venusaur	http://www.serebii.net/pokemongo/pokemon/003.png	['Grass', 'Poison']	2.01 m	100.0 kg	Bulbasaur Candy	NaN	Not in Eggs	
3	4	4	Charmander	http://www.serebii.net/pokemongo/pokemon/004.png	['Fire']	0.61 m	8.5 kg	Charmander Candy	25.0	2 km	
4	5	5	Charmeleon	http://www.serebii.net/pokemongo/pokemon/005.png	['Fire']	1.09 m	19.0 kg	Charmander Candy	100.0	Not in Eggs	
...	...	...	...	...	...	...	...	...	...	...	
146	147	147	Dratini	http://www.serebii.net/pokemongo/pokemon/147.png	['Dragon']	1.80 m	3.3 kg	Dratini Candy	25.0	10 km	
147	148	148	Dragonair	http://www.serebii.net/pokemongo/pokemon/148.png	['Dragon']	3.99 m	16.5 kg	Dratini Candy	100.0	Not in Eggs	
148	149	149	Dragonite	http://www.serebii.net/pokemongo/pokemon/149.png	['Dragon', 'Flying']	2.21 m	210.0 kg	Dratini Candy	NaN	Not in Eggs	
149	150	150	Mewtwo	http://www.serebii.net/pokemongo/pokemon/150.png	['Psychic']	2.01 m	122.0 kg	None	NaN	Not in Eggs	
150	151	151	Mew	http://www.serebii.net/pokemongo/pokemon/151.png	['Psychic']	0.41 m	4.0 kg	None	NaN	Not in Eggs	

151 rows × 17 columns

In [13]:
```
df1.dtypes
```

Out[13]:
```
id                int64
num               int64
name             object
img              object
type             object
height           object
weight           object
candy            object
candy_count     float64
egg              object
spawn_chance    float64
avg_spawns      float64
spawn_time       object
multipliers      object
weaknesses       object
next_evolution   object
prev_evolution   object
dtype: object
```