Name: - L Prathyusha

Pokemon Data

In [3]:

```
import pandas as pd

#to upload csv file
df3=pd.read_csv('C:/Users/Prathyu Lachireddy/Desktop/BP/pokemon_data.csv')

#print(df3.tail(5))

#read a specific function
print(df3.iloc[2,1])
```

```
Venusaur
```

In [4]:

```
df3
```

Out[4]:

	#	Name	Type 1	Type 2	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	I
0	1	Bulbasaur	Grass	Poison	45	49	49	65	65	45	1	
1	2	Ivysaur	Grass	Poison	60	62	63	80	80	60	1	
2	3	Venusaur	Grass	Poison	80	82	83	100	100	80	1	
3	3	VenusaurMega Venusaur	Grass	Poison	80	100	123	122	120	80	1	
4	4	Charmander	Fire	NaN	39	52	43	60	50	65	1	
...	...	...	...	...	...	...	...	...	...	...	...	
795	719	Diancie	Rock	Fairy	50	100	150	100	150	50	6	
796	719	DiancieMega Diancie	Rock	Fairy	50	160	110	160	110	110	6	
797	720	HoopaHoopa Confined	Psychic	Ghost	80	110	60	150	130	70	6	
798	720	HoopaHoopa Unbound	Psychic	Dark	80	160	60	170	130	80	6	
799	721	Volcanion	Fire	Water	80	110	120	130	90	70	6	

800 rows × 12 columns

In [5]:

```
for index, row in df3.iterrows():
    print(index,row['Name'])
```

```
0 Bulbasaur
1 Ivysaur
2 Venusaur
3 VenusaurMega Venusaur
4 Charmander
5 Charmeleon
6 Charizard
7 CharizardMega Charizard X
8 CharizardMega Charizard Y
9 Squirtle
10 Wartortle
11 Blastoise
12 BlastoiseMega Blastoise
13 Caterpie
14 Metapod
15 Butterfree
16 Weedle
17 Kakuna
18 Beedrill
```

In [6]:

```
print(df3.columns)
```

```
Index(['#', 'Name', 'Type 1', 'Type 2', 'HP', 'Attack', 'Defense', 'Sp. At
k',
       'Sp. Def', 'Speed', 'Generation', 'Legendary'],
      dtype='object')
```

In [7]:

```
print(df3['Name'][0:5])
```

```
0               Bulbasaur
1                 Ivysaur
2                Venusaur
3    VenusaurMega Venusaur
4              Charmander
Name: Name, dtype: object
```

In [8]:

```
df3.sort_values(['Name'],ascending=False)
```

Out[8]:

	#	Name	Type 1	Type 2	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generatic
794	718	Zygarde50% Forme	Dragon	Ground	108	100	121	81	95	95	
695	634	Zweilous	Dark	Dragon	72	85	70	65	70	58	
46	41	Zubat	Poison	Flying	40	45	35	30	40	55	
631	570	Zorua	Dark	NaN	40	65	40	80	40	65	
632	571	Zoroark	Dark	NaN	60	105	60	120	60	105	
...	...	...	...	...	...	...	...	...	...	...	
393	359	AbsolMega Absol	Dark	NaN	65	150	60	115	60	115	
392	359	Absol	Dark	NaN	65	130	60	75	60	75	
68	63	Abra	Psychic	NaN	25	20	15	105	55	90	
511	460	AbomasnowMega Abomasnow	Grass	Ice	90	132	105	132	105	30	
510	460	Abomasnow	Grass	Ice	90	92	75	92	85	60	

800 rows × 12 columns

In [9]:

```
df3.head(5)
```

Out[9]:

	#	Name	Type 1	Type 2	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legend
0	1	Bulbasaur	Grass	Poison	45	49	49	65	65	45	1	F
1	2	Ivysaur	Grass	Poison	60	62	63	80	80	60	1	F
2	3	Venusaur	Grass	Poison	80	82	83	100	100	80	1	F
3	3	VenusaurMega Venusaur	Grass	Poison	80	100	123	122	120	80	1	F
4	4	Charmander	Fire	NaN	39	52	43	60	50	65	1	F

In [10]:

```
df3['Total']= df3['HP']+ df3['Attack']+ df3['Defense'] + df3['Sp. Atk']+ df3['Sp. Def']+ df

#df3.head(5)

#to remove or drop the total

df3=df3.drop(columns=['Total'])
df3['Total']=df3.iloc[:,4:10].sum(axis=1)

df3
```

Out[10]:

	#	Name	Type 1	Type 2	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation
0	1	Bulbasaur	Grass	Poison	45	49	49	65	65	45	1
1	2	Ivysaur	Grass	Poison	60	62	63	80	80	60	1
2	3	Venusaur	Grass	Poison	80	82	83	100	100	80	1
3	3	VenusaurMega Venusaur	Grass	Poison	80	100	123	122	120	80	1
4	4	Charmander	Fire	NaN	39	52	43	60	50	65	1
...	...	...	...	...	...	...	...	...	...	...	...
795	719	Diancie	Rock	Fairy	50	100	150	100	150	50	6
796	719	DiancieMega Diancie	Rock	Fairy	50	160	110	160	110	110	6
797	720	HoopaHoopa Confined	Psychic	Ghost	80	110	60	150	130	70	6
798	720	HoopaHoopa Unbound	Psychic	Dark	80	160	60	170	130	80	6
799	721	Volcanion	Fire	Water	80	110	120	130	90	70	6

800 rows × 13 columns

In [11]:

```
df3.to_csv('modified.csv',index=False)
```

In [12]:

```
new_df3 = df3.loc[(df3['Type 1'] == 'Grass') & (df3['Type 2'] == 'Poison') & (df3['HP'] > 7

new_df3=new_df3.reset_index(drop=True)
new_df3
```

Out[12]:

	#	Name	Type 1	Type 2	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Leg
0	3	Venusaur	Grass	Poison	80	82	83	100	100	80	1	
1	3	VenusaurMega Venusaur	Grass	Poison	80	100	123	122	120	80	1	
2	45	Vileplume	Grass	Poison	75	80	85	110	90	50	1	
3	71	Victreebel	Grass	Poison	80	105	65	100	70	70	1	
4	591	Amoonguss	Grass	Poison	114	85	70	85	80	30	5	

In [13]:

```
df3=pd.read_csv('modified.csv')
df3.groupby(['Type 1']).mean().sort_values('Defense',ascending=False)

df3['count']=1

df3.groupby(['Type 1','Type 2']).count()['count']
```

Out[13]:

```
Type 1  Type 2
Bug     Electric     2
        Fighting     2
        Fire         2
        Flying      14
        Ghost        1
                    ..
Water   Ice          3
        Poison       3
        Psychic      5
        Rock         4
        Steel        1
Name: count, Length: 136, dtype: int64
```

In [ ]: