

## ▼ Project: Querying and Filtering Pokemon data

This project will help you practice your pandas querying and filtering skills. Let's begin!



Photo by [Mikel](https://unsplash.com/@mykelgran?utm_source=unsplash&utm_medium=referral&utm_content=creditCopyText) ([https://unsplash.com/@mykelgran?utm\\_source=unsplash&utm\\_medium=referral&utm\\_content=creditCopyText](https://unsplash.com/@mykelgran?utm_source=unsplash&utm_medium=referral&utm_content=creditCopyText)) on [Unsplash](https://unsplash.com/s/photos/pokemon?utm_source=unsplash&utm_medium=referral&utm_content=creditCopyText) ([https://unsplash.com/s/photos/pokemon?utm\\_source=unsplash&utm\\_medium=referral&utm\\_content=creditCopyText](https://unsplash.com/s/photos/pokemon?utm_source=unsplash&utm_medium=referral&utm_content=creditCopyText)).

## ▼ Task 0 - Setup

There isn't much to do here, we'll provide the required imports and then read the pokemon CSV we'll be working with.

```
In [109]: import numpy as np
import pandas as pd

import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [110]: df = pd.read_csv("pokemon.csv")
```

```
In [3]: df.head()
```

```
Out[3]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
0	1	Bulbasaur	Grass	Poison	318	45	49	49	65	65	45	1	False
1	2	Ivysaur	Grass	Poison	405	60	62	63	80	80	60	1	False
2	3	Venusaur	Grass	Poison	525	80	82	83	100	100	80	1	False
3	4	Charmander	Fire	NaN	309	39	52	43	60	50	65	1	False
4	5	Charmeleon	Fire	NaN	405	58	64	58	80	65	80	1	False

In [4]:

df.info()

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 721 entries, 0 to 720
Data columns (total 13 columns):
#   Column      Non-Null Count  Dtype
---  -
0   #           721 non-null   int64
1   Name        721 non-null   object
2   Type 1      721 non-null   object
3   Type 2      359 non-null   object
4   Total       721 non-null   int64
5   HP          721 non-null   int64
6   Attack      721 non-null   int64
7   Defense     721 non-null   int64
8   Sp. Atk     721 non-null   int64
9   Sp. Def     721 non-null   int64
10  Speed       721 non-null   int64
11  Generation  721 non-null   int64
12  Legendary   721 non-null   bool
dtypes: bool(1), int64(9), object(3)
memory usage: 68.4+ KB
```

In [5]:

df.describe()

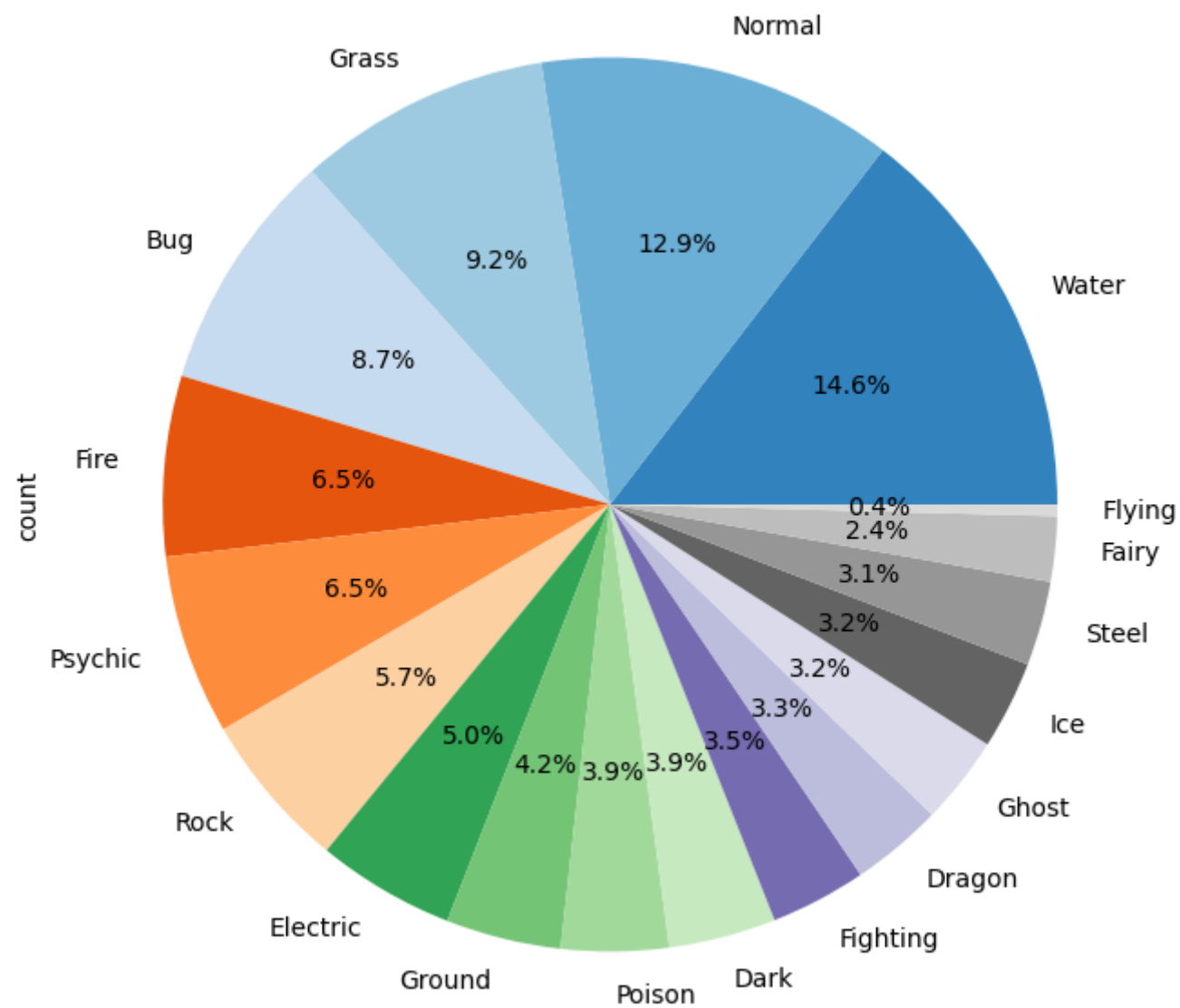
Out[5]:

	#	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation
<b>count</b>	721.00000	721.000000	721.000000	721.000000	721.000000	721.000000	721.000000	721.000000	721.000000
<b>mean</b>	361.00000	417.945908	68.380028	75.124827	70.697642	68.848821	69.180305	65.714286	3.323162
<b>std</b>	208.27906	109.663671	25.848272	29.070335	29.194941	28.898590	26.899364	27.277920	1.669873
<b>min</b>	1.00000	180.000000	1.000000	5.000000	5.000000	10.000000	20.000000	5.000000	1.000000
<b>25%</b>	181.00000	320.000000	50.000000	54.000000	50.000000	45.000000	50.000000	45.000000	2.000000
<b>50%</b>	361.00000	424.000000	65.000000	75.000000	65.000000	65.000000	65.000000	65.000000	3.000000
<b>75%</b>	541.00000	499.000000	80.000000	95.000000	85.000000	90.000000	85.000000	85.000000	5.000000
<b>max</b>	721.00000	720.000000	255.000000	165.000000	230.000000	154.000000	230.000000	160.000000	6.000000

▼ **Distribution of Pokemon Types:**

```
In [6]: df['Type 1'].value_counts().plot(kind='pie', autopct='%1.1f%%', cmap='tab20c', figsize=(10, 8))
```

```
Out[6]: <Axes: ylabel='count'>
```

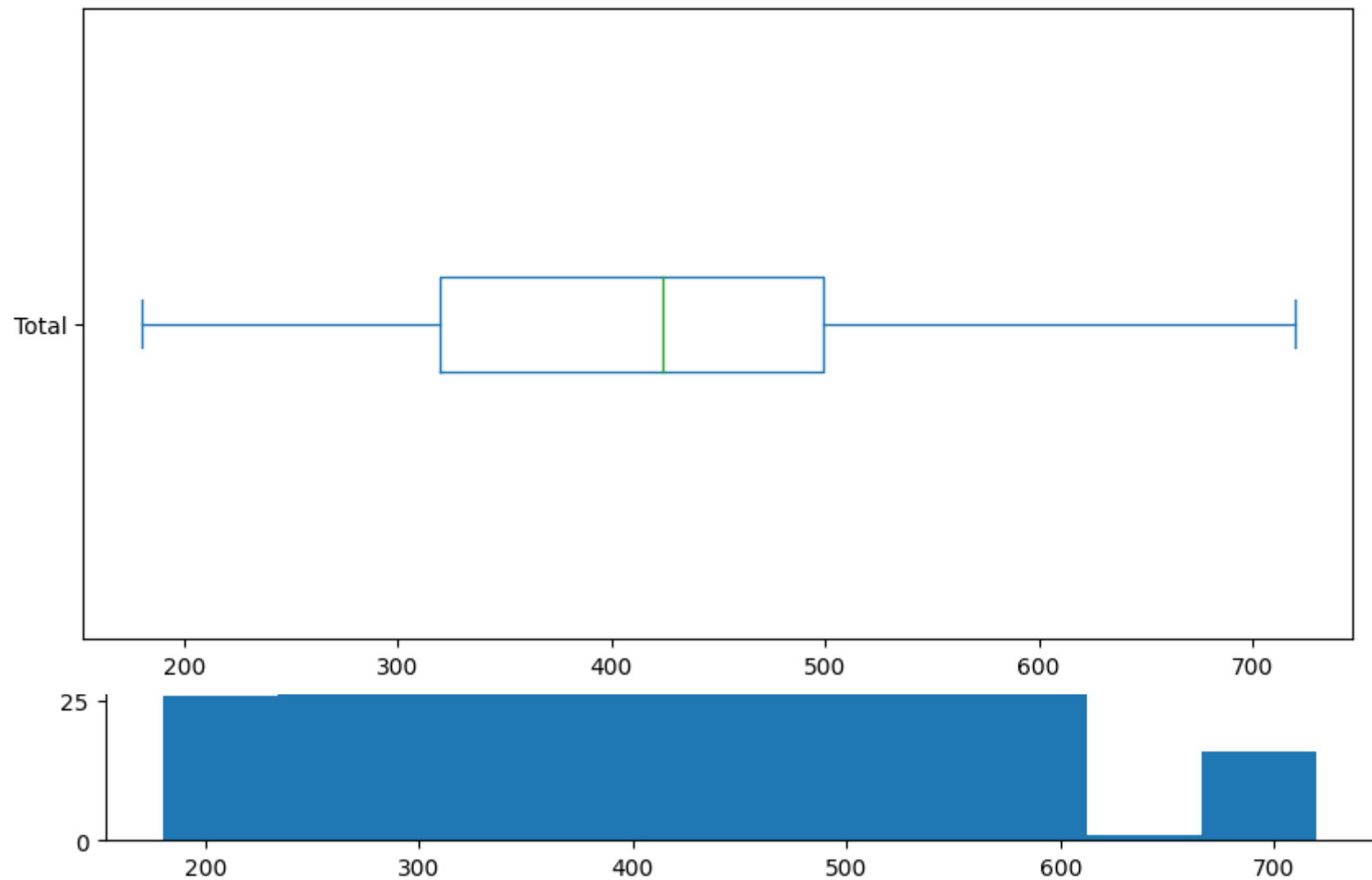


```
In [7]: df['Total'].plot(kind='hist', figsize=(10, 8))
```

```
Out[7]: <Axes: ylabel='Frequency'>
```

```
In [8]: df['Total'].plot(kind='box', vert=False, figsize=(10, 5))
```

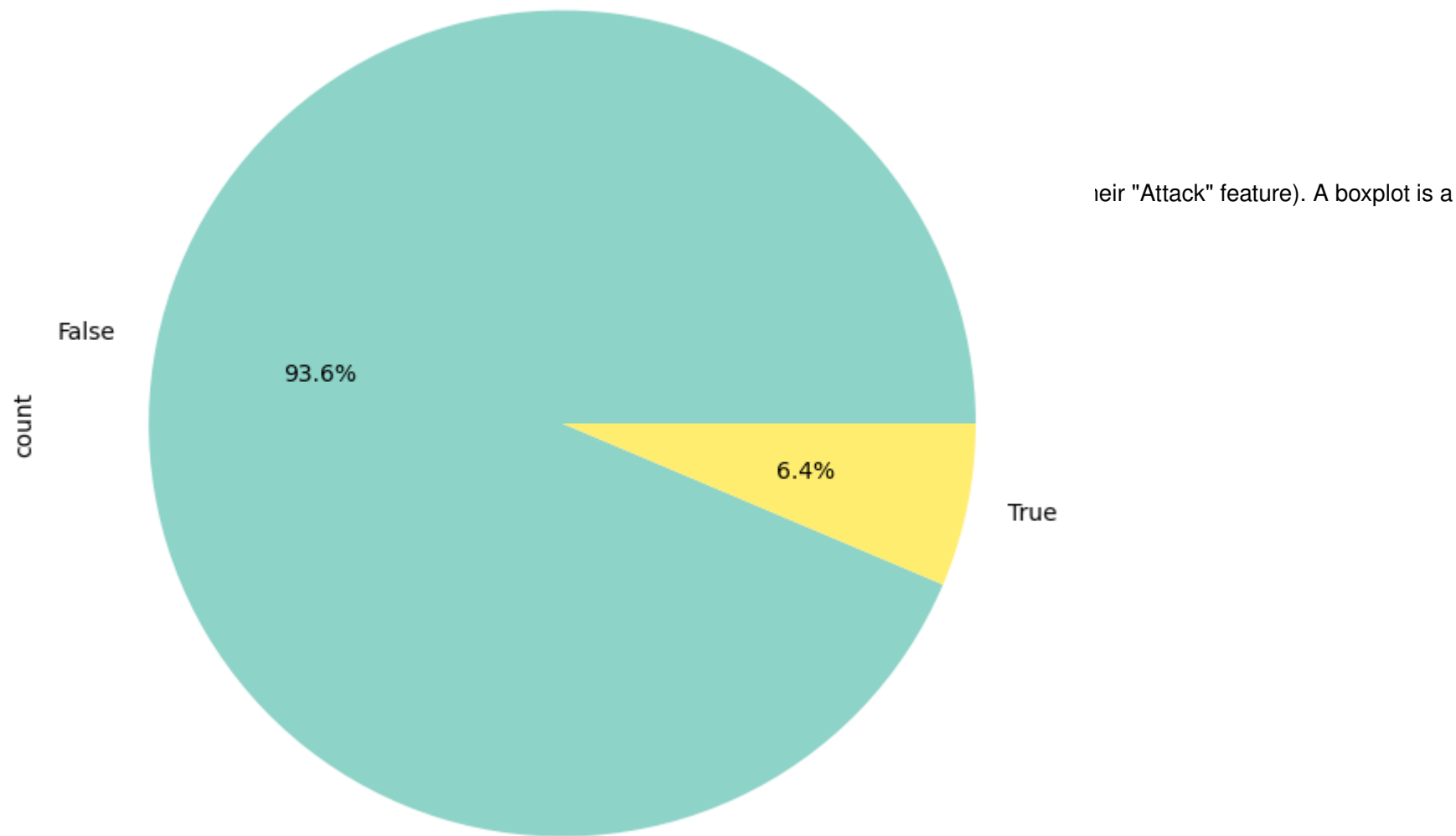
```
Out[8]: <Axes: >
```





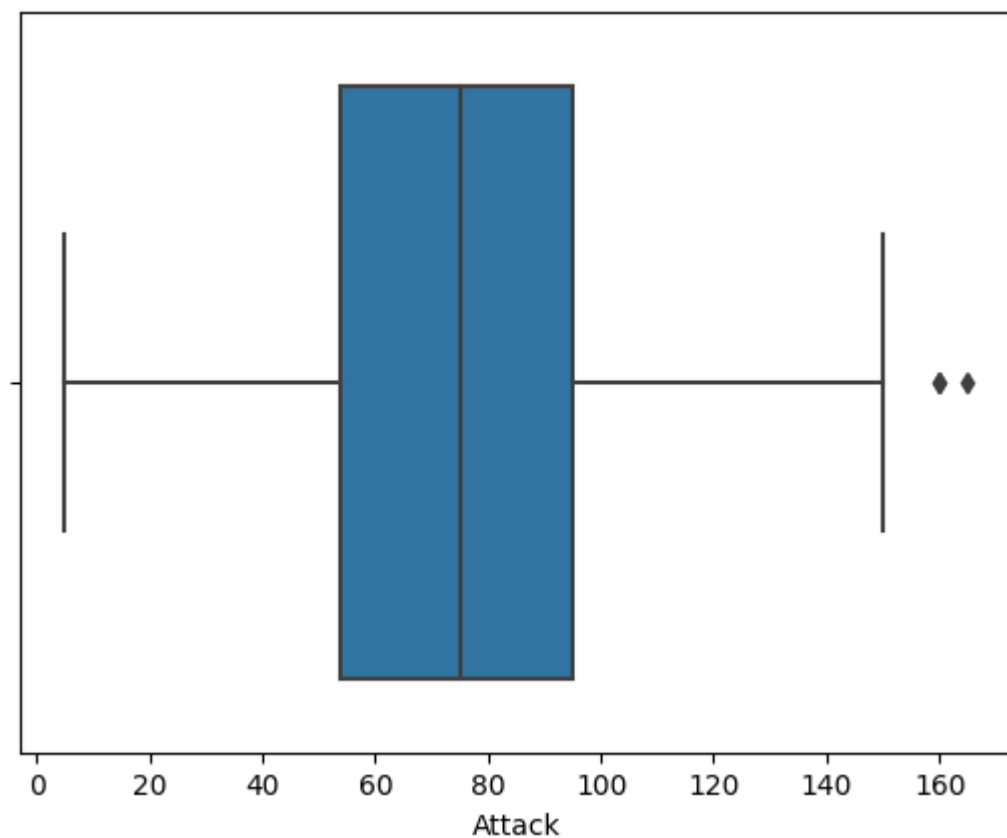
```
In [9]: df['Legendary'].value_counts().plot(kind='pie', autopct='%1.1f%%', cmap='Set3', figsize=(10, 8))
```

```
Out[9]: <Axes: ylabel='count'>
```



```
In [10]: sns.boxplot(data=df, x='Attack')
```

```
Out[10]: <Axes: xlabel='Attack'>
```



```
In [11]: # Try your code here
df.loc[df['Attack'] > 150]
```

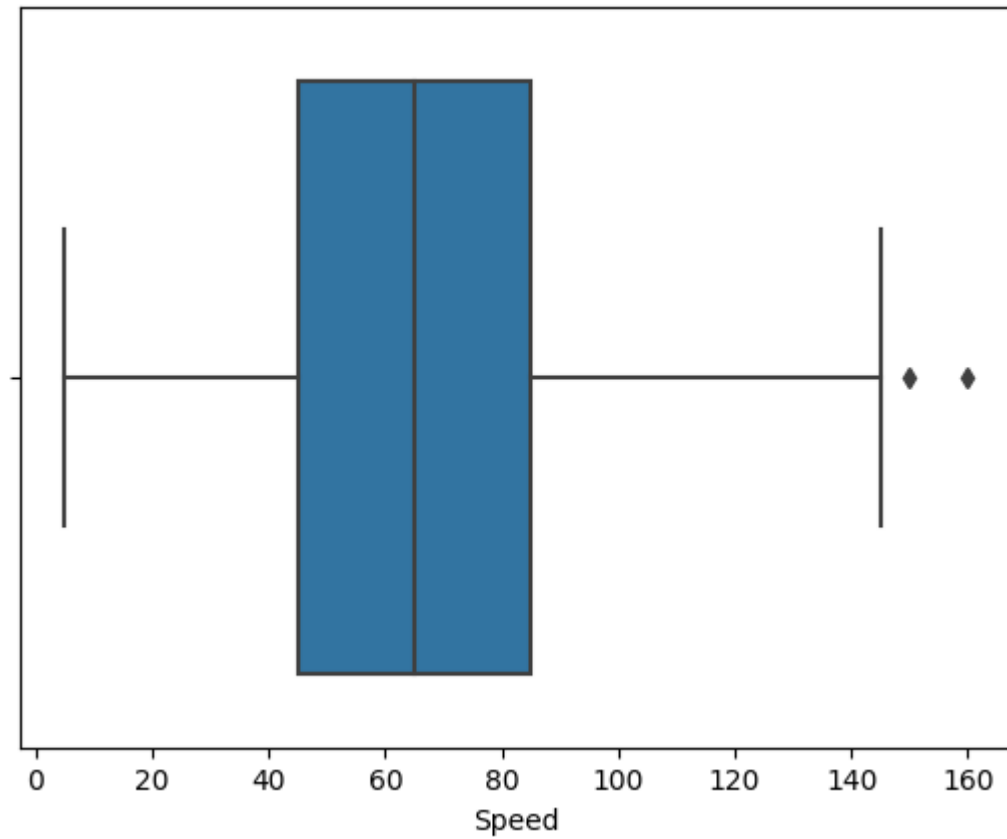
```
Out[11]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
<b>288</b>	289	Slaking	Normal	NaN	670	150	160	100	95	65	100	3	False
<b>408</b>	409	Rampardos	Rock	NaN	495	97	165	60	65	50	58	4	False
<b>485</b>	486	Regigigas	Normal	NaN	670	110	160	110	80	110	100	4	True

▼ **2. Select all pokemons with a Speed of 10 or less**

```
In [12]: sns.boxplot(data=df, x='Speed')
```

```
Out[12]: <Axes: xlabel='Speed'>
```



```
In [14]: slow_pokemons_df = df.loc[df['Speed'] <=10]
```

▼ **3. How many Pokemons have a Sp. Def value of 25 or less?**

```
In [15]: # Try your code here
df.loc[df['Sp. Def'] <= 25]
```

```
Out[15]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
<b>9</b>	10	Caterpie	Bug	NaN	195	45	30	35	20	20	45	1	False
<b>10</b>	11	Metapod	Bug	NaN	205	50	20	55	25	25	30	1	False
<b>12</b>	13	Weedle	Bug	Poison	195	40	35	30	20	20	50	1	False
<b>13</b>	14	Kakuna	Bug	Poison	205	45	25	50	25	25	35	1	False
<b>38</b>	39	Jigglypuff	Normal	Fairy	270	115	45	20	45	25	20	1	False
<b>89</b>	90	Shellder	Water	NaN	305	30	65	100	45	25	40	1	False
<b>97</b>	98	Krabby	Water	NaN	325	30	105	90	25	25	50	1	False
<b>115</b>	116	Horsea	Water	NaN	295	30	40	70	70	25	60	1	False
<b>128</b>	129	Magikarp	Water	NaN	200	20	10	55	15	20	80	1	False
<b>173</b>	174	Igglybuff	Normal	Fairy	210	90	30	15	40	20	15	2	False
<b>193</b>	194	Wooper	Water	Ground	210	55	45	45	25	25	15	2	False
<b>265</b>	266	Silcoon	Bug	NaN	205	50	35	55	25	25	15	3	False
<b>267</b>	268	Cascoon	Bug	NaN	205	50	35	55	25	25	15	3	False
<b>292</b>	293	Whismur	Normal	NaN	240	64	51	23	51	23	28	3	False
<b>317</b>	318	Carvanha	Water	Dark	305	45	90	20	65	20	65	3	False
<b>523</b>	524	Roggenrola	Rock	NaN	280	55	75	85	25	25	15	5	False
<b>663</b>	664	Scatterbug	Bug	NaN	200	38	35	40	27	25	35	6	False

▼ **4. Select all the Legendary pokemons**

```
In [16]: # Try your code here
legendary_df = df[df['Legendary']]
legendary_df
```

```
Out[16]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
143	144	Articuno	Ice	Flying	580	90	85	100	95	125	85	1	True
144	145	Zapdos	Electric	Flying	580	90	90	85	125	90	100	1	True
145	146	Moltres	Fire	Flying	580	90	100	90	125	85	90	1	True
149	150	Mewtwo	Psychic	Fighting	680	106	110	90	154	90	130	1	True
242	243	Raikou	Electric	NaN	580	90	85	75	115	100	115	2	True
243	244	Entei	Fire	NaN	580	115	115	85	90	75	100	2	True
244	245	Suicune	Water	NaN	580	100	75	115	90	115	85	2	True
248	249	Lugia	Psychic	Flying	680	106	90	130	90	154	110	2	True
249	250	Ho-oh	Fire	Flying	680	106	130	90	110	154	90	2	True
376	377	Regirock	Rock	NaN	580	80	100	200	50	100	50	3	True
377	378	Regice	Ice	NaN	580	80	50	100	100	200	50	3	True
378	379	Registeel	Steel	NaN	580	80	75	150	75	150	50	3	True
379	380	Latias	Dragon	Psychic	600	80	80	90	110	130	110	3	True
380	381	Latios	Dragon	Psychic	600	80	90	80	130	110	110	3	True
381	382	Kyogre	Water	NaN	670	100	100	90	150	140	90	3	True
382	383	Groudon	Ground	Fire	670	100	150	140	100	90	90	3	True
383	384	Rayquaza	Dragon	Flying	680	105	150	90	150	90	95	3	True
384	385	Jirachi	Steel	Psychic	600	100	100	100	100	100	100	3	True
385	386	DeoxysNormal Forme	Psychic	NaN	600	50	150	50	150	50	150	3	True
479	480	Uxie	Psychic	NaN	580	75	75	130	75	130	95	4	True
480	481	Mesprit	Psychic	NaN	580	80	105	105	105	105	80	4	True
481	482	Azelf	Psychic	NaN	580	75	125	70	125	70	115	4	True

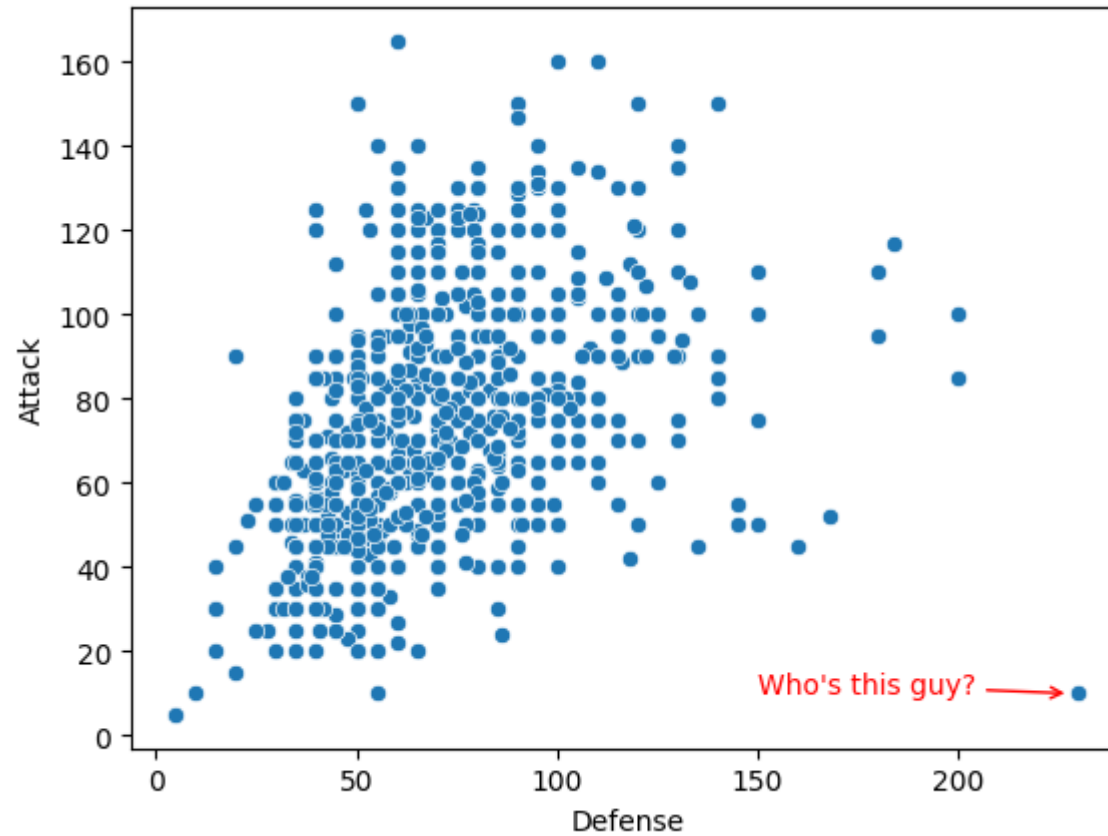
	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
482	483	Dialga	Steel	Dragon	680	100	120	120	150	100	90	4	True
483	484	Palkia	Water	Dragon	680	90	120	100	150	120	100	4	True
484	485	Heatran	Fire	Steel	600	91	90	106	130	106	77	4	True
485	486	Regigigas	Normal	NaN	670	110	160	110	80	110	100	4	True
486	487	GiratinaAltered Forme	Ghost	Dragon	680	150	100	120	100	120	90	4	True
490	491	Darkrai	Dark	NaN	600	70	90	90	135	90	125	4	True
491	492	ShayminLand Forme	Grass	Flying	600	100	100	100	100	100	100	4	True
492	493	Arceus	Normal	NaN	720	120	120	120	120	120	120	4	True
493	494	Victini	Psychic	Fire	600	100	100	100	100	100	100	5	True
637	638	Cobalion	Steel	Fighting	580	91	90	129	90	72	108	5	True
638	639	Terrakion	Rock	Fighting	580	91	129	90	72	90	108	5	True
639	640	Virizion	Grass	Fighting	580	91	90	72	90	129	108	5	True
640	641	TornadusIncarnate Forme	Flying	NaN	580	79	115	70	125	80	111	5	True
641	642	ThundurusIncarnate Forme	Electric	Flying	580	79	115	70	125	80	111	5	True
642	643	Reshiram	Dragon	Fire	680	100	120	100	150	120	90	5	True
643	644	Zekrom	Dragon	Electric	680	100	150	120	120	100	90	5	True
644	645	LandorusIncarnate Forme	Ground	Flying	600	89	125	90	115	80	101	5	True
645	646	Kyurem	Dragon	Ice	660	125	130	90	130	90	95	5	True
715	716	Xerneas	Fairy	NaN	680	126	131	95	131	98	99	6	True
716	717	Yveltal	Dark	Flying	680	126	131	95	131	98	99	6	True
717	718	Zygarde50% Forme	Dragon	Ground	600	108	100	121	81	95	95	6	True
718	719	Diancie	Rock	Fairy	600	50	100	150	100	150	50	6	True
719	720	HoopaHoopa Confined	Psychic	Ghost	600	80	110	60	150	130	70	6	True

▼ **5. Find the outlier**

Find the pokemon that is clearly an outlier in terms of Attack / Defense:

```
In [18]: ax = sns.scatterplot(data=df, x="Defense", y="Attack")
ax.annotate(
    "Who's this guy?", xy=(228, 10), xytext=(150, 10), color='red',
    arrowprops=dict(arrowstyle="->", color='red')
)
```

Out[18]: Text(150, 10, "Who's this guy?")



```
In [26]: attack_cond = df['Attack'] < 20
```



```
In [27]: defence_cond = df['Defense'] > 200
```

```
In [29]: # Try your code here
df.loc[attack_cond & defence_cond]
```

```
Out[29]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
212	213	Shuckle	Bug	Rock	505	20	10	230	10	230	5	2	False

## ▼ Advanced selection

Now let's use boolean operators to create more advanced expressions

### ▼ 6. How many Fire-Flying Pokemons are there?

```
In [38]: # Try your code here
df_query = df.query("`Type 1`=='Fire' and `Type 2`=='Flying'")
df_query
```

```
Out[38]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
5	6	Charizard	Fire	Flying	534	78	84	78	109	85	100	1	False
145	146	Moltres	Fire	Flying	580	90	100	90	125	85	90	1	True
249	250	Ho-oh	Fire	Flying	680	106	130	90	110	154	90	2	True
661	662	Fletchinder	Fire	Flying	382	62	73	55	56	52	84	6	False
662	663	Talonflame	Fire	Flying	499	78	81	71	74	69	126	6	False

```
In [40]: df.loc[((df['Type 1']=='Fire') & (df['Type 2']=='Flying'))]
```

```
Out[40]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary	
	5	6	Charizard	Fire	Flying	534	78	84	78	109	85	100	1	False
	145	146	Moltres	Fire	Flying	580	90	100	90	125	85	90	1	True
	249	250	Ho-oh	Fire	Flying	680	106	130	90	110	154	90	2	True
	661	662	Fletchinder	Fire	Flying	382	62	73	55	56	52	84	6	False
	662	663	Talonflame	Fire	Flying	499	78	81	71	74	69	126	6	False

▼ **7. How many 'Poison' pokemons are across both types?**

```
In [45]: # Try your code here
df.query("`Type 1`=='Poison' or `Type 2`=='Poison'").shape
```

```
Out[45]: (59, 13)
```

▼ **8. What pokemon of Type 1 Ice has the strongest defense?**

```
In [51]: # Try your code here
ice_type1_pokemons = df.loc[df['Type 1']=='Ice']
```

```
In [55]: df.loc[df['Defense'] == ice_type1_pokemons['Defense'].max()]
```

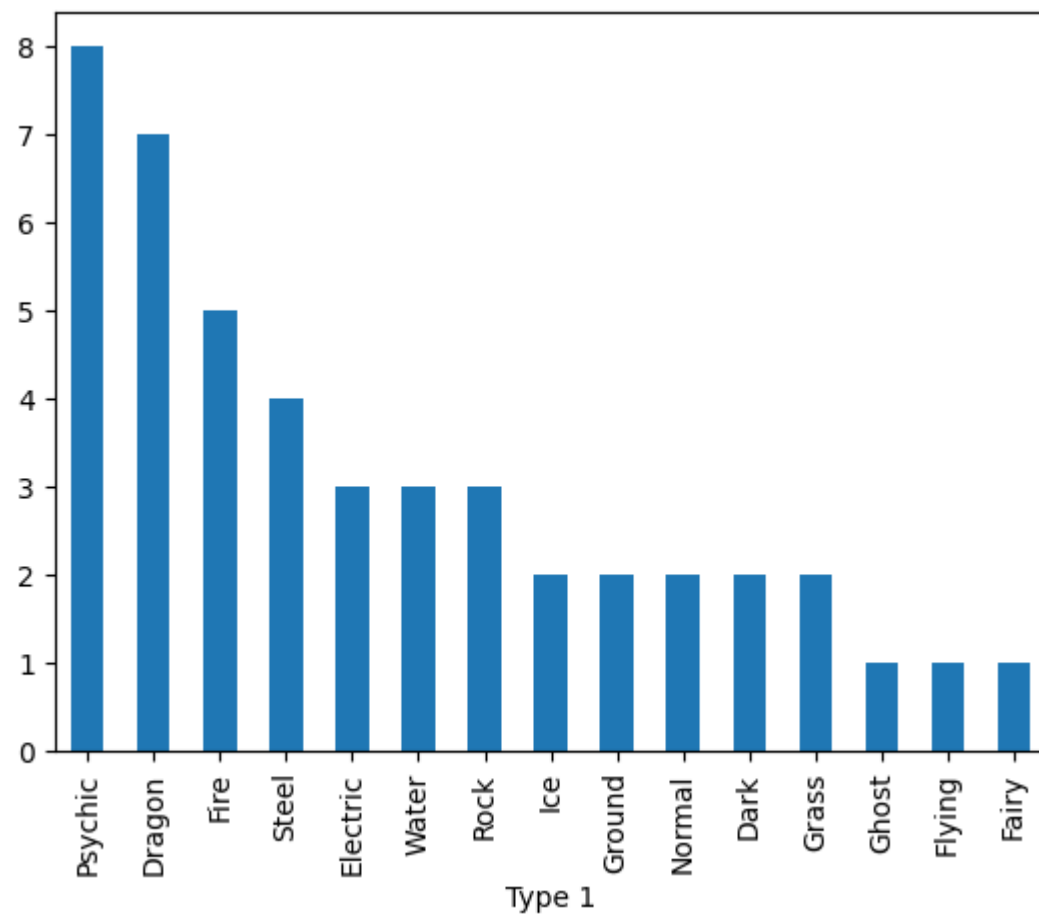
```
Out[55]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary	
	712	713	Avalugg	Ice	NaN	514	95	117	184	44	46	28	6	False

▼ **9. What's the most common type of Legendary Pokemons?**

```
In [66]: # Try your code here
legendary_df = df.loc[df['Legendary']]
legendary_df['Type 1'].value_counts().plot(kind = 'bar')
```

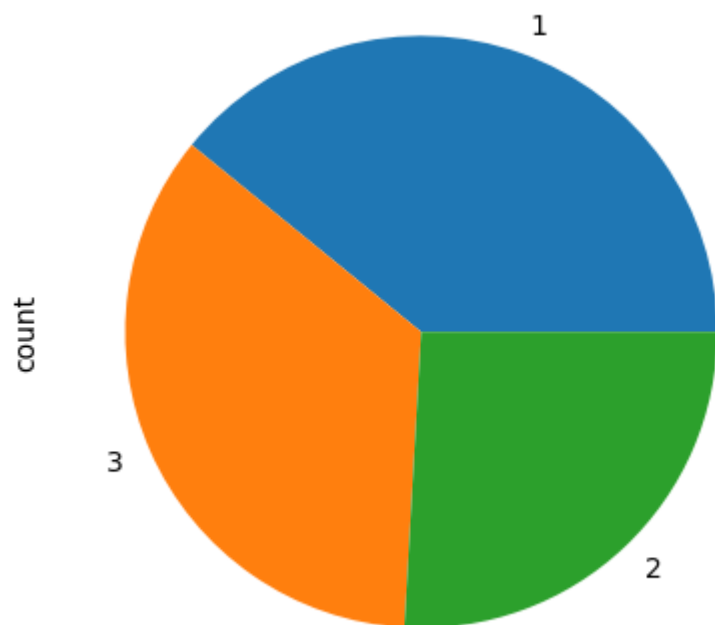
Out[66]: <Axes: xlabel='Type 1'>



- ▼ 10. What's the most powerful pokemon from the first 3 generations, of type water?

```
In [69]: # Try your code here
df_3_gens = df.loc[df['Generation'].isin([1,2,3])]
df_3_gens['Generation'].value_counts().plot(kind='pie')
```

Out[69]: <Axes: ylabel='count'>



```
In [73]: df_3_gens_water = df_3_gens.query("`Type 1`=='Water' or `Type 2`=='Water'")
df_3_gens_water.loc[df_3_gens_water['Total']==df_3_gens_water['Total'].max()]
```

Out[73]:

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
381	382	Kyogre	Water	NaN	670	100	100	90	150	140	90	3	True

```
In [74]: df_3_gens_water.sort_values(by='Total', ascending=False)
```

```
Out[74]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
<b>381</b>	382	Kyogre	Water	NaN	670	100	100	90	150	140	90	3	True
<b>244</b>	245	Suicune	Water	NaN	580	100	75	115	90	115	85	2	True
<b>349</b>	350	Milotic	Water	NaN	540	95	60	79	100	125	81	3	False
<b>229</b>	230	Kingdra	Water	Dragon	540	75	95	95	95	95	85	2	False
<b>129</b>	130	Gyarados	Water	Flying	540	95	125	79	60	100	81	1	False
...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>182</b>	183	Marill	Water	Fairy	250	70	20	50	20	50	40	2	False
<b>269</b>	270	Lotad	Water	Grass	220	40	30	30	40	50	30	3	False
<b>193</b>	194	Wooper	Water	Ground	210	55	45	45	25	25	15	2	False
<b>128</b>	129	Magikarp	Water	NaN	200	20	10	55	15	20	80	1	False
<b>348</b>	349	Feebas	Water	NaN	200	20	15	20	10	55	80	3	False

78 rows × 13 columns

▼ **11. What's the most powerful Dragon from the last two generations?**

```
In [75]: # Try your code here
df['Generation'].value_counts()
```

```
Out[75]: Generation
5      156
1      151
3      135
4      107
2      100
6       72
Name: count, dtype: int64
```

```
In [87]: df.loc[((df['Generation'].isin([5,6]))
               & ((df['Type 1']=='Dragon') | (df['Type 2']=='Dragon'))
               )].sort_values(by='Total', ascending=False)
```

```
Out[87]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
<b>643</b>	644	Zekrom	Dragon	Electric	680	100	150	120	120	100	90	5	True
<b>642</b>	643	Reshiram	Dragon	Fire	680	100	120	100	150	120	90	5	True
<b>645</b>	646	Kyurem	Dragon	Ice	660	125	130	90	130	90	95	5	True
<b>634</b>	635	Hydreigon	Dark	Dragon	600	92	105	90	125	90	98	5	False
<b>705</b>	706	Goodra	Dragon	NaN	600	90	100	70	110	150	80	6	False
<b>717</b>	718	Zygarde50% Forme	Dragon	Ground	600	108	100	121	81	95	95	6	True
<b>611</b>	612	Haxorus	Dragon	NaN	540	76	147	90	60	70	97	5	False
<b>714</b>	715	Noivern	Flying	Dragon	535	85	70	80	97	80	123	6	False
<b>696</b>	697	Tyrantrum	Rock	Dragon	521	82	121	119	69	59	71	6	False
<b>690</b>	691	Dragalge	Poison	Dragon	494	65	75	90	97	123	44	6	False
<b>620</b>	621	Druddigon	Dragon	NaN	485	77	120	90	60	90	48	5	False
<b>704</b>	705	Sliggoo	Dragon	NaN	452	68	75	53	83	113	60	6	False
<b>633</b>	634	Zweilous	Dark	Dragon	420	72	85	70	65	70	58	5	False
<b>610</b>	611	Fraxure	Dragon	NaN	410	66	117	70	40	50	67	5	False
<b>695</b>	696	Tyrant	Rock	Dragon	362	58	89	77	45	45	48	6	False
<b>609</b>	610	Axew	Dragon	NaN	320	46	87	60	30	40	57	5	False
<b>632</b>	633	Deino	Dark	Dragon	300	52	65	50	45	50	38	5	False
<b>703</b>	704	Goomy	Dragon	NaN	300	45	50	35	55	75	40	6	False
<b>713</b>	714	Noibat	Flying	Dragon	245	40	30	35	45	40	55	6	False

## ▼ 12. Select most powerful Fire-type pokemons

```
In [99]: # Try your code here
powerful_fire_df = df.query("`Type 1`=='Fire' and `Attack`>100")
powerful_fire_df
```

```
Out[99]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
58	59	Arcanine	Fire	NaN	555	90	110	80	100	80	95	1	False
135	136	Flareon	Fire	NaN	525	65	130	60	95	110	65	1	False
243	244	Entei	Fire	NaN	580	115	115	85	90	75	100	2	True
249	250	Ho-oh	Fire	Flying	680	106	130	90	110	154	90	2	True
256	257	Blaziken	Fire	Fighting	530	80	120	70	110	70	80	3	False
391	392	Infernape	Fire	Fighting	534	76	104	71	104	71	108	4	False
499	500	Emboar	Fire	Fighting	528	110	123	65	100	65	65	5	False
554	555	DarmanitanStandard Mode	Fire	Psychic	480	105	140	55	30	55	95	5	False
720	721	Volcanion	Fire	Water	600	80	110	120	130	90	70	6	True

▼ **13. Select all Water-type, Flying-type pokemons**

```
In [104]: # Try your code here
water_flying_df = df.query("`Type 1`=='Water' and `Type 2`=='Flying'")
water_flying_df
```

```
Out[104]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
129	130	Gyarados	Water	Flying	540	95	125	79	60	100	81	1	False
225	226	Mantine	Water	Flying	465	65	40	70	80	140	70	2	False
277	278	Wingull	Water	Flying	270	40	30	30	55	30	85	3	False
278	279	Pelipper	Water	Flying	430	60	50	100	85	70	65	3	False
457	458	Mantyke	Water	Flying	345	45	20	50	60	120	50	4	False
579	580	Ducklett	Water	Flying	305	62	44	50	44	50	55	5	False
580	581	Swanna	Water	Flying	473	75	87	63	87	63	98	5	False

▼ **14. Select specific columns of Legendary pokemons of type Fire**

```
In [117]: # Try your code here
legendary_fire_df = df.loc[(df['Type 1']=='Fire') & (df['Legendary'])][['Name', 'Attack', 'Generation']]
legendary_fire_df
```

```
Out[117]:
```

	Name	Attack	Generation
145	Moltres	100	1
243	Entei	115	2
249	Ho-oh	130	2
484	Heatran	90	4
720	Volcanion	110	6

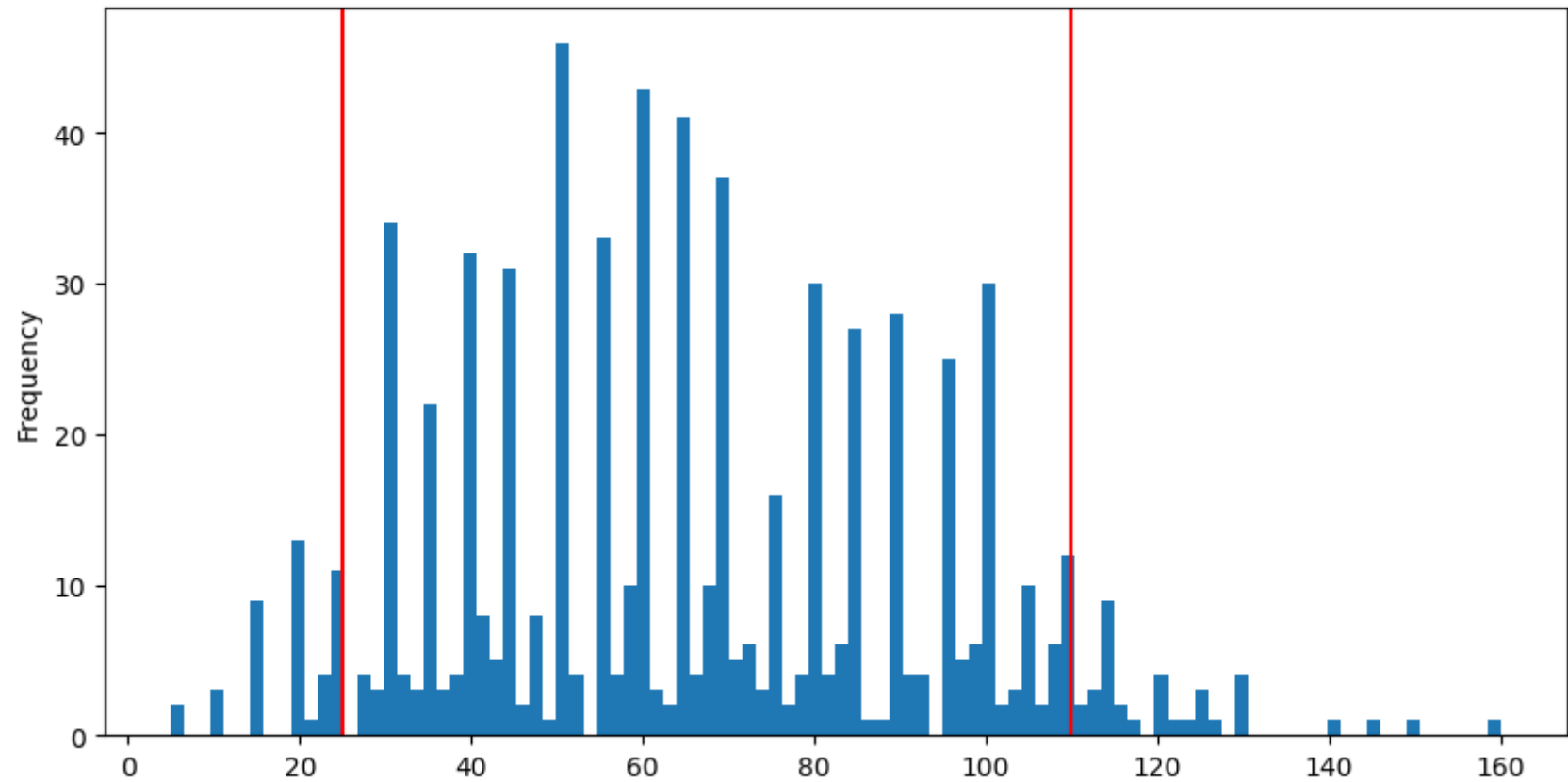
▼ **15. Select Slow and Fast pokemons**



This is the distribution of speed of the pokemons. The red lines indicate those bottom 5% and top 5% pokemons by speed:

```
In [119]: ax = df['Speed'].plot(kind='hist', figsize=(10, 5), bins=100)
ax.axvline(df['Speed'].quantile(.05), color='red')
ax.axvline(df['Speed'].quantile(.95), color='red')
```

```
Out[119]: <matplotlib.lines.Line2D at 0x7f492e54e910>
```



```
In [120]: df['Speed'].describe()
```

```
Out[120]: count      721.000000
          mean       65.714286
          std        27.277920
          min         5.000000
          25%        45.000000
          50%        65.000000
          75%        85.000000
          max       160.000000
          Name: Speed, dtype: float64
```

```
In [135]: bottom_5 = df['Speed'].quantile(.05)
          bottom_5
```

```
Out[135]: 25.0
```

```
In [136]: top_5 = df['Speed'].quantile(.95)
          top_5
```

```
Out[136]: 110.0
```

```
In [137]: # Try your code here
slow_fast_df = df.loc[(df['Speed'] < bottom_5) | (df['Speed'] > top_5)]
slow_fast_df
```

```
Out[137]:
```

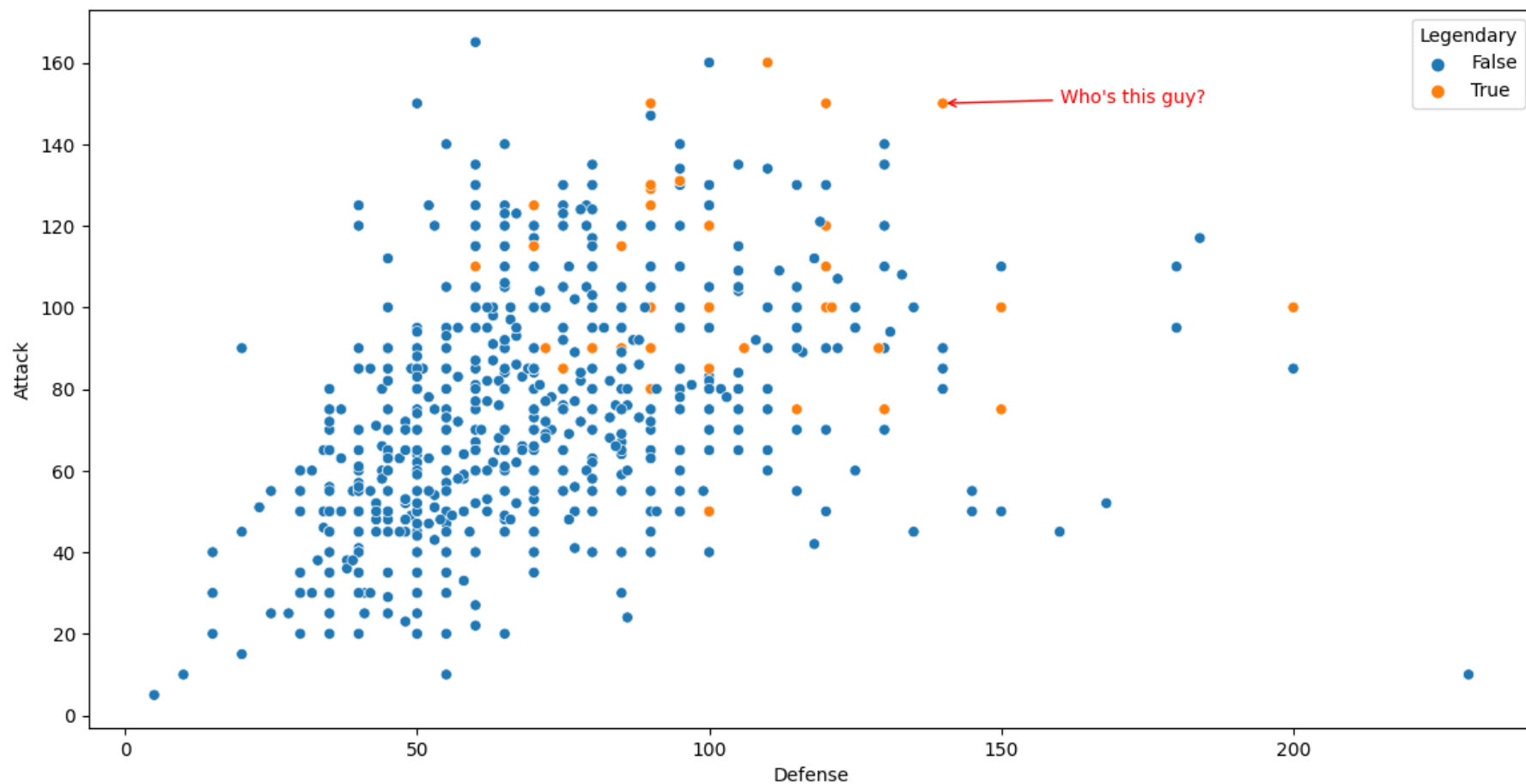
	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
38	39	Jigglypuff	Normal	Fairy	270	115	45	20	45	25	20	1	False
50	51	Dugtrio	Ground	NaN	405	35	80	50	50	70	120	1	False
52	53	Persian	Normal	NaN	440	65	70	60	65	65	115	1	False
64	65	Alakazam	Psychic	NaN	500	55	50	45	135	95	120	1	False
73	74	Geodude	Rock	Ground	300	40	80	100	30	30	20	1	False
...	...	...	...	...	...	...	...	...	...	...	...	...	...
657	658	Greninja	Water	Dark	530	72	95	67	103	71	122	6	False
662	663	Talonflame	Fire	Flying	499	78	81	71	74	69	126	6	False
681	682	Spritzee	Fairy	NaN	341	78	52	60	63	65	23	6	False
700	701	Hawlucha	Fighting	Flying	500	78	92	75	74	63	118	6	False
714	715	Noivern	Flying	Dragon	535	85	70	80	97	80	123	6	False

68 rows × 13 columns

▼ **16. Find the Ultra Powerful Legendary Pokemon**

```
In [139]: fig, ax = plt.subplots(figsize=(14, 7))
sns.scatterplot(data=df, x="Defense", y="Attack", hue='Legendary', ax=ax)
ax.annotate(
    "Who's this guy?", xy=(140, 150), xytext=(160, 150), color='red',
    arrowprops=dict(arrowstyle="->", color='red')
)
```

Out[139]: Text(160, 150, "Who's this guy?")



```
In [140]: # Try your code here
df.query("`Attack` > 140 and `Defense` > 100")
```

```
Out[140]:
```

	#	Name	Type 1	Type 2	Total	HP	Attack	Defense	Sp. Atk	Sp. Def	Speed	Generation	Legendary
<b>382</b>	383	Groudon	Ground	Fire	670	100	150	140	100	90	90	3	True
<b>485</b>	486	Regigigas	Normal	NaN	670	110	160	110	80	110	100	4	True
<b>643</b>	644	Zekrom	Dragon	Electric	680	100	150	120	120	100	90	5	True

▼ **The End!**