

Data Visualization

FICTIONAL

POKEMON

DATASET

INTRODUCTION

For this data visualization project, we analyzed the Pokémon dataset, a popular collection of data on Pokémon characters, attributes, and stats. The dataset includes information such as each Pokémon's type, base stats (like attack, defense, and speed), generation, height, weight etc. Our aim was to use visualizations to uncover interesting insights and patterns within the data, such as the distribution of types, strengths and weaknesses by generation, and the comparison of legendary versus non-legends Pokémon. By leveraging Python libraries like Matplotlib, Seaborn, numpy, pandas and Turtle we were able to create an engaging and informative exploration of the Pokémon universe, making complex data easy to interpret and visually appealing for enthusiasts and analysts alike.

BARPLOTS

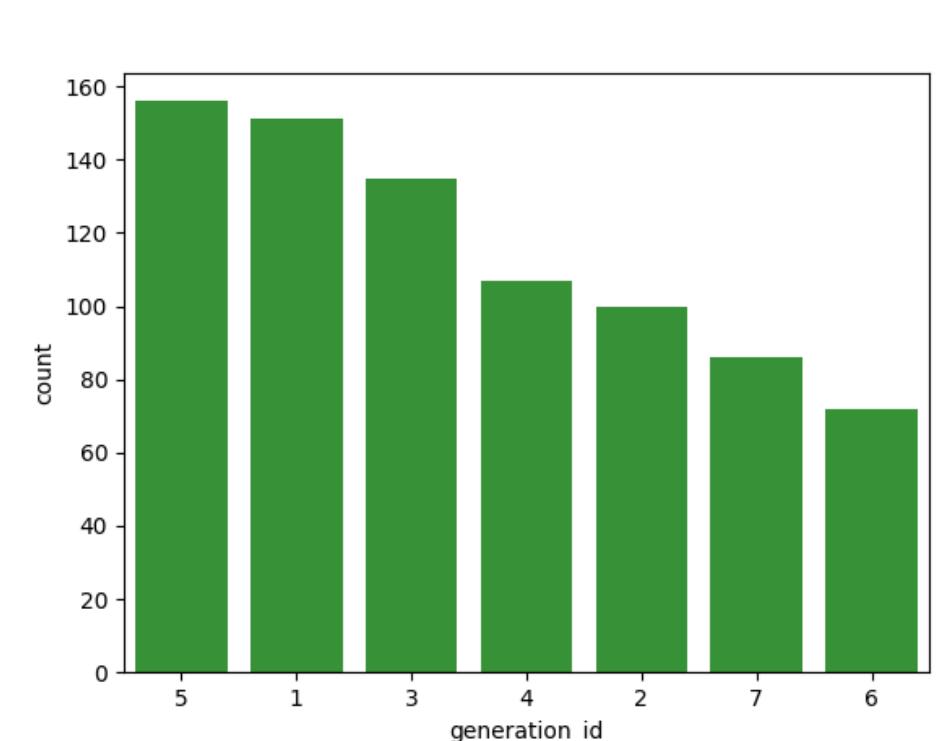
```
import numpy as py
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sb

pokemon=pd.read_csv('pokemon.csv')
print(pokemon.head(21))

print(pokemon.isna())
print(pokemon.isna().sum())

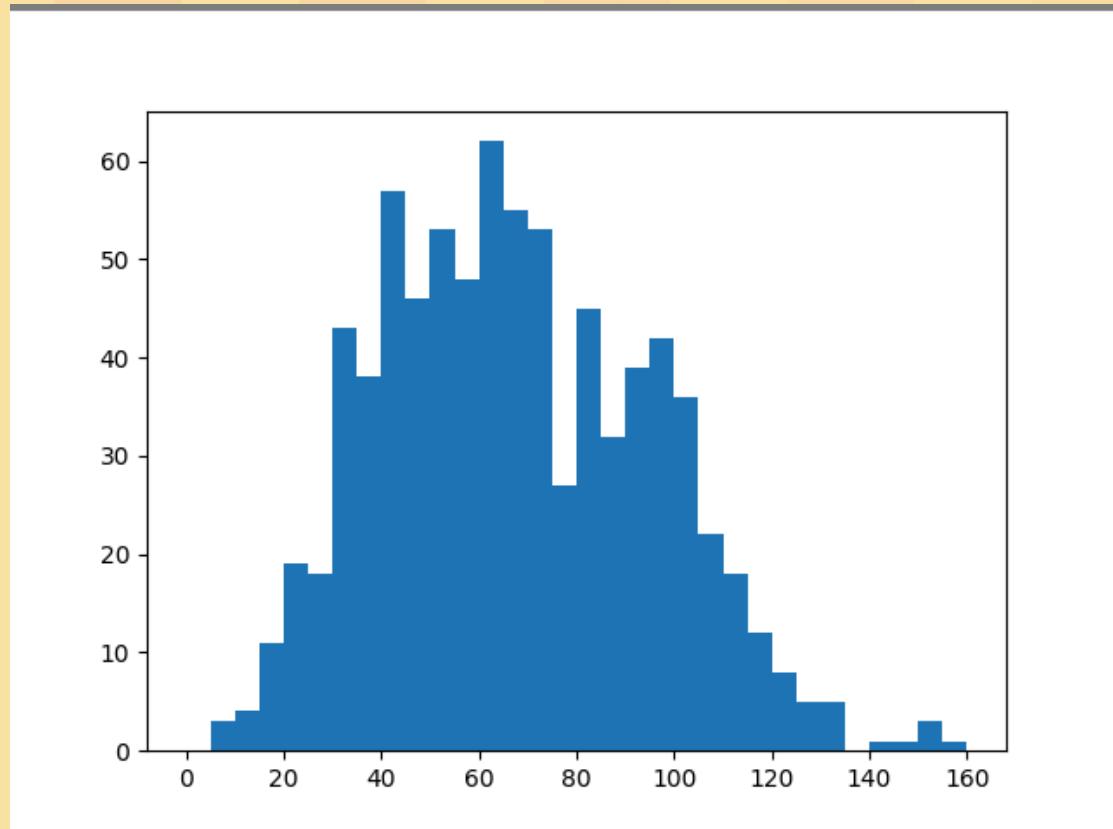
color_bar=sb.color_palette()[2]
gen_order=pokemon['generation_id'].value_counts().index
sb.countplot(data=pokemon,x='generation_id',color=color_bar, order=gen_order)

plt.show()
```



BINS

```
import py_compile  
from tokenize import PlainToken  
from turtle import pd  
  
import numpy as np  
import pandas as pd  
import matplotlib.pyplot as plt  
import seaborn as sb  
  
df=pd.read_csv('pokemon.csv')  
print(df)  
  
bins2=np.arange(0,df['speed'].max()+1,5)  
plt.hist(data=df,x='speed',bins=bins2)  
  
plt.show()
```



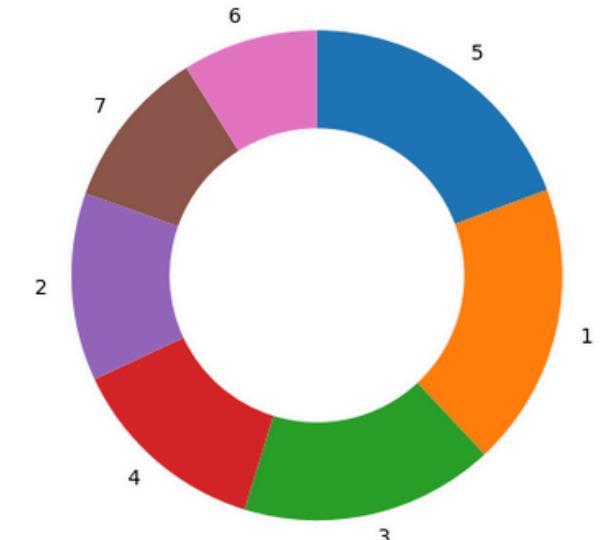
DONUTSPIE

```
from turtle import color
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sb

df=pd.read_csv('pokemon.csv')
print(df.head())

orderedpie=df['generation_id'].value_counts()
plt.pie(orderedpie,labels=orderedpie.index, startangle=90, counterclock=False,wedgeprops={'width':0.4})
plt.axis('square');

plt.show()
```



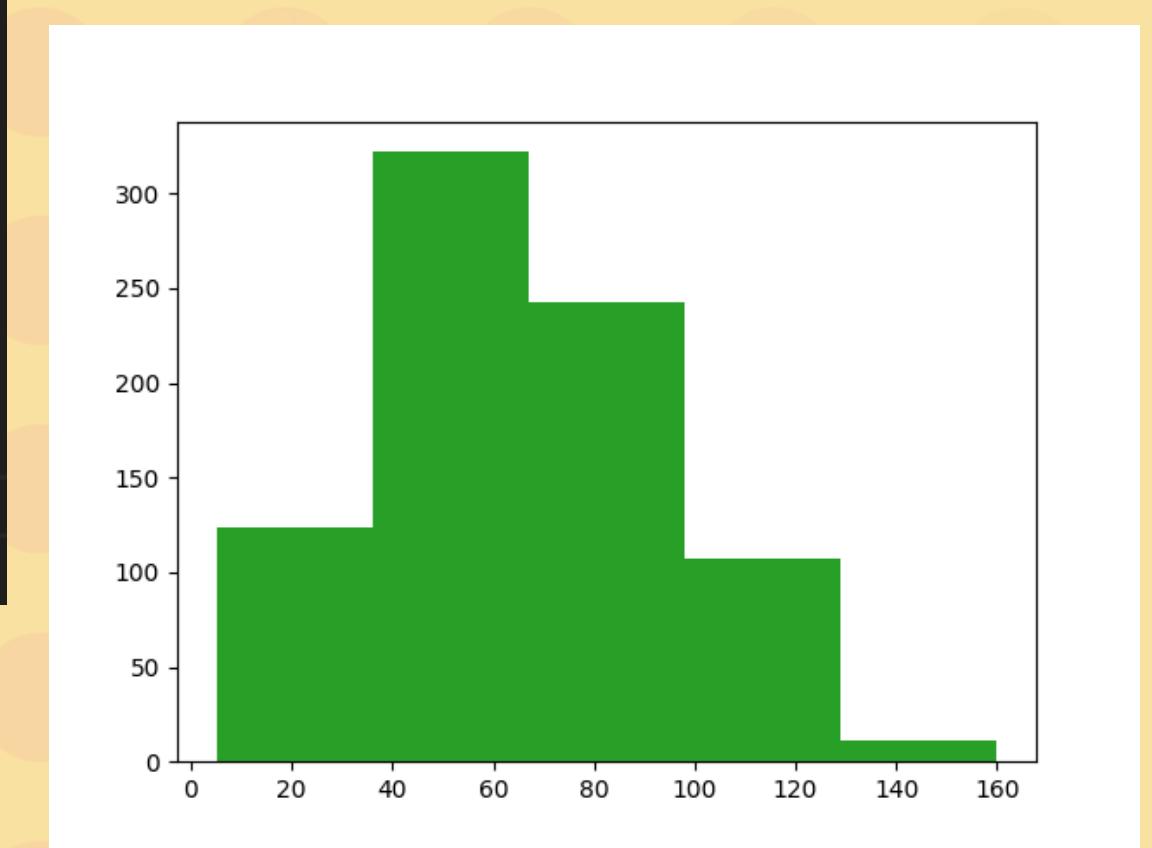
HISTOGRAM

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sb

df=pd.read_csv('pokemon.csv')
print(df)

#histogram
base_color=sb.color_palette()[2]
plt.hist(data=df,x='speed',color=base_color,bins=5)

plt.show()
```



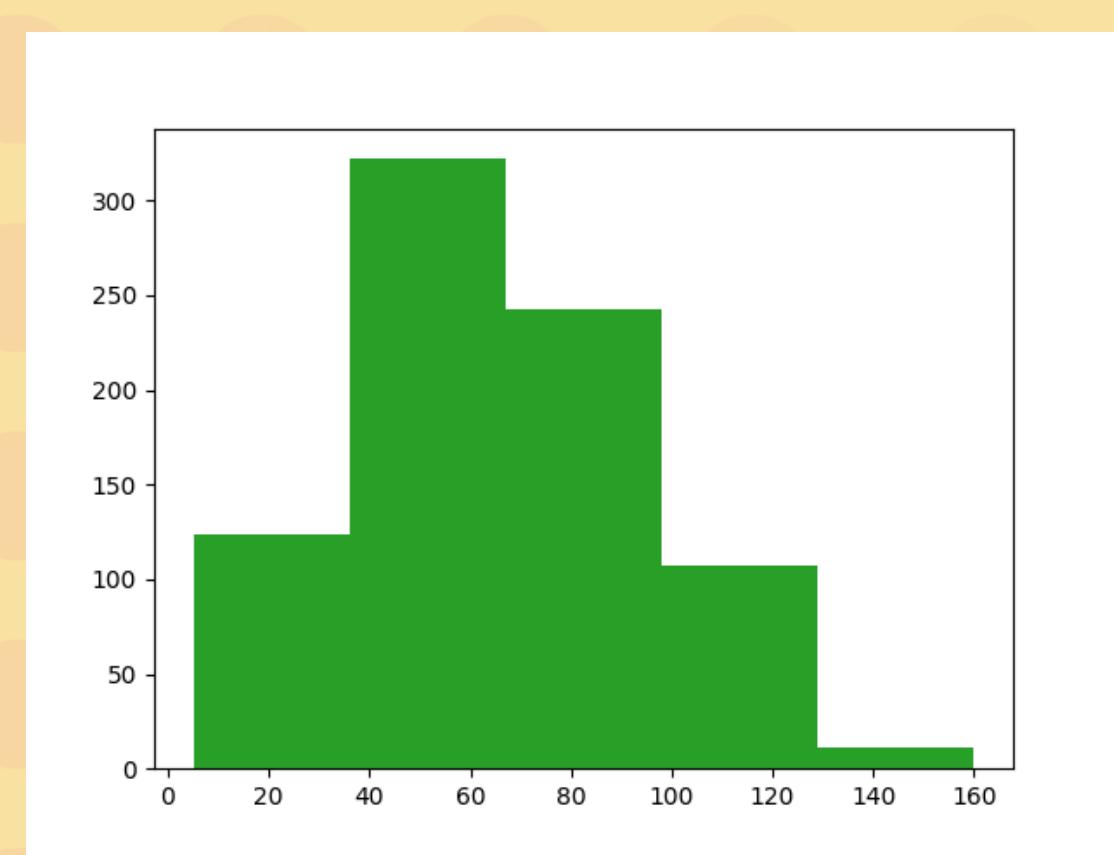
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```



QQ

THANK YOU

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