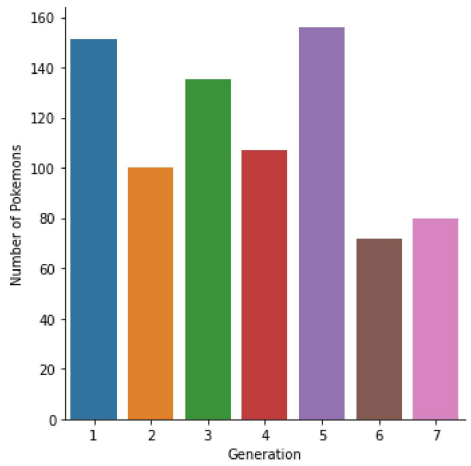
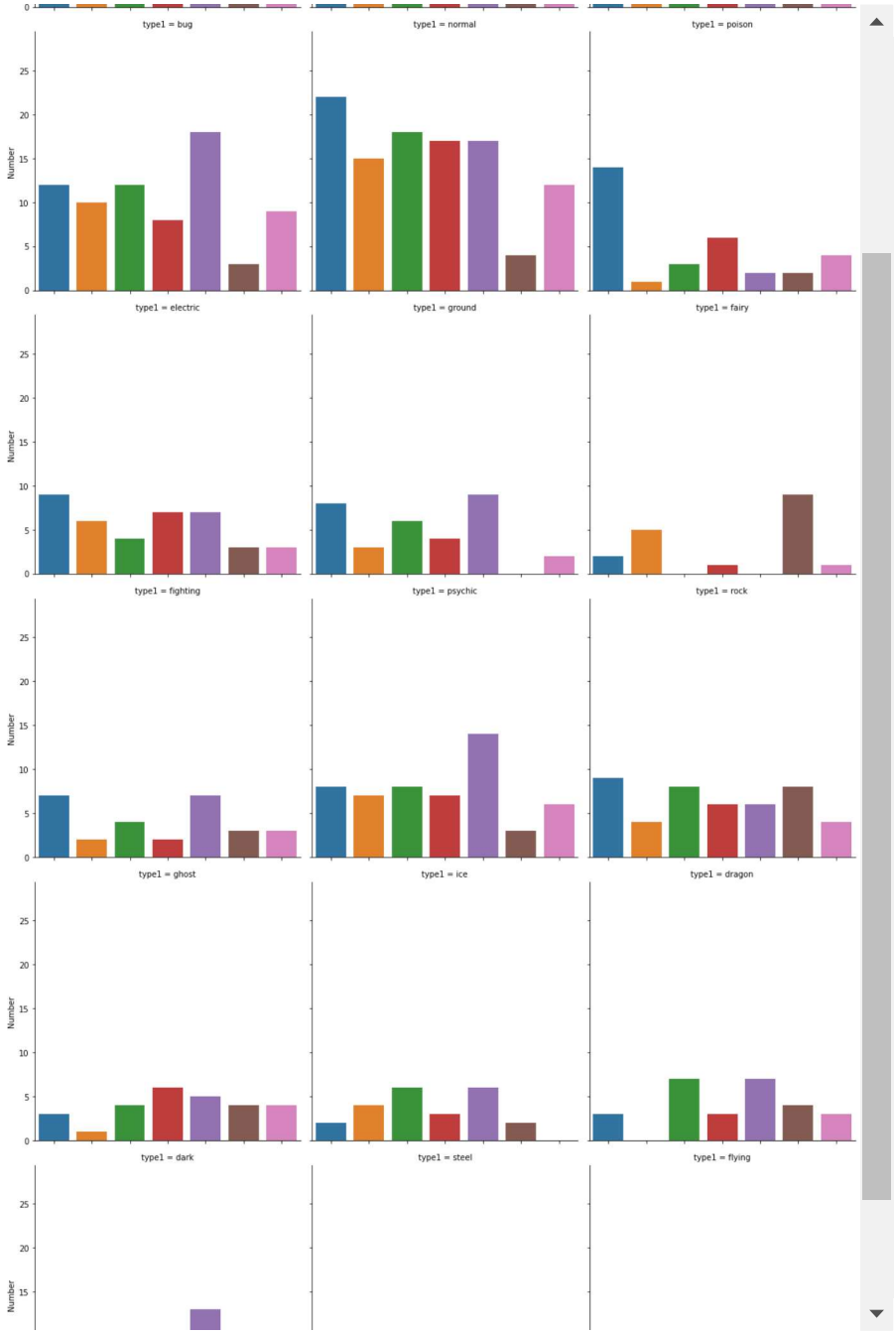
```
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
import numpy as np
df = pd.read_csv('pokemon.csv')


# Count the number of pokemons per generation.
print(df.shape)
sns.catplot(
    x = 'generation',
    data = df,
    kind = 'count'
).set_axis_labels('Generation', 'Number of Pokemons');
```

```
(801, 41)
```

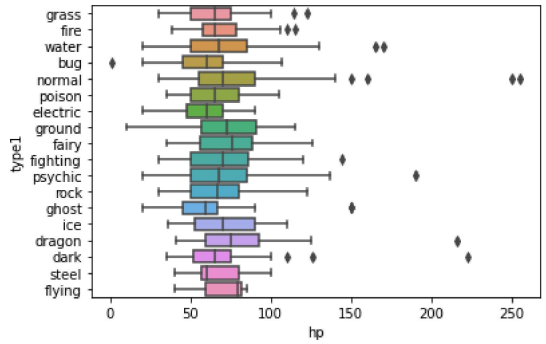



```
# Types of pokemons per generation
sns.catplot(
    x = 'generation',
    data= df,
    col = 'type1',
    kind = 'count',
    col_wrap = 3
).set_axis_labels('Generation', 'Number')
```


type1 = bug
type1 = normal
type1 = poison
type1 = electric
type1 = ground
type1 = fairy
type1 = fighting
type1 = psychic
type1 = rock
type1 = ghost
type1 = ice
type1 = dragon
type1 = dark
type1 = steel
type1 = flying
Number

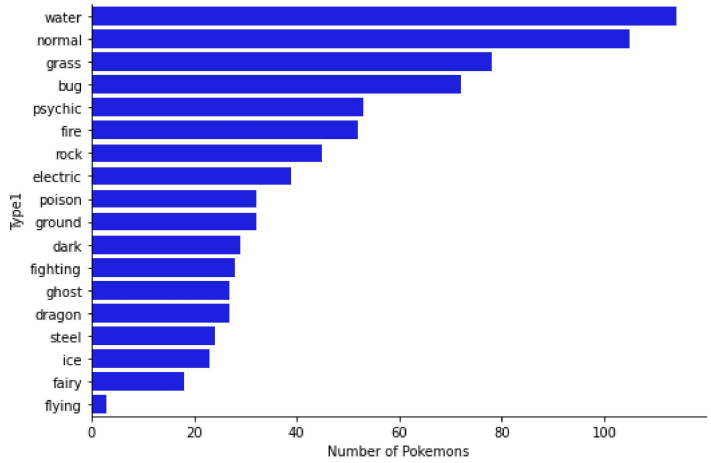
```
# Show the variability in HP in different types of pokemons using BoxPlot.
sns.boxplot(data=df , x='hp', y='type1')
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f8f499c4ac0>
```



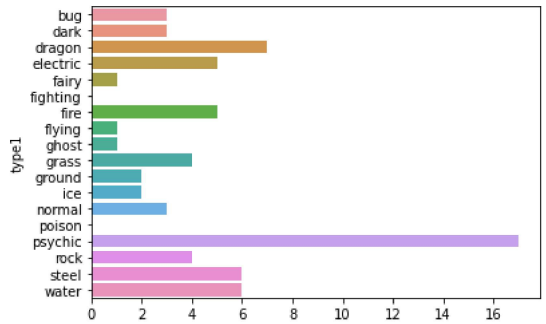

```
# Which type is the most easy to catch.
sns.catplot(
    y = 'type1',
    data = df,
    kind = 'count',
    order = df['type1'].value_counts().index,
    aspect = 1.5,
    color = 'blue'
).set_axis_labels('Number of Pokemons', 'Type1')

# As we can see, water is the most common, hence easier to catch.
```

```
<seaborn.axisgrid.FacetGrid at 0x7f8f4958bbb0>
```



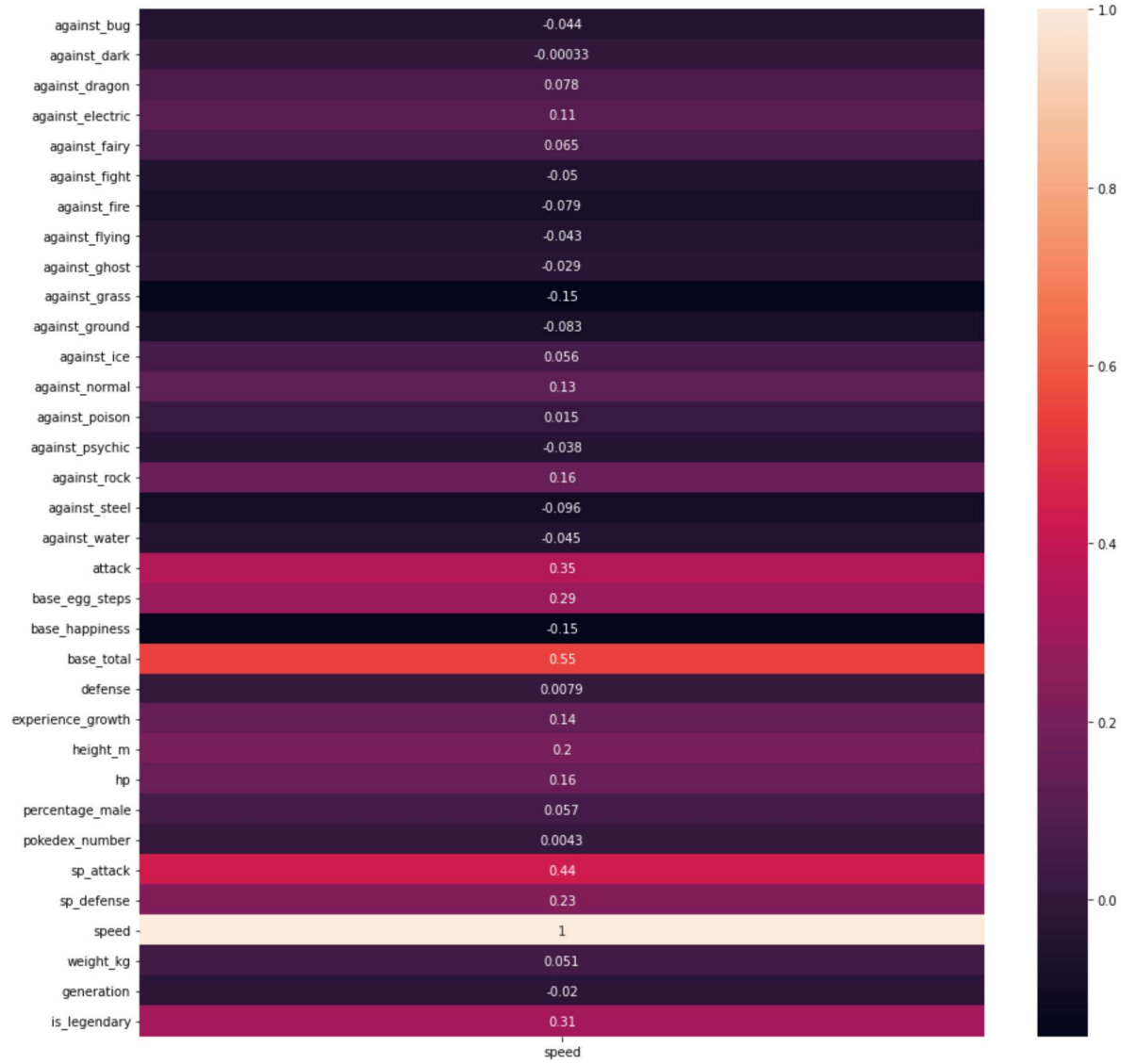

```
# Which type is most likely to be legendary.
type_df = df.groupby('type1')
legfreq = type_df['is_legendary'].sum()
sns.barplot(x=legfreq.values, y=legfreq.index)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f8f49231c70>
```



```
# Correlation heatmap for speed.
fig, ax = plt.subplots(figsize=(15,15))
sns.heatmap(df.corr()[['speed']], annot=True)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f8f4869a040>
```




```
# Generation 4 pokemon which can beat legendary pokemon of
# higher generation.

# Lets find out the strength of each pokemon.
```

```
df.columns
```

```
Index(['abilities', 'against_bug', 'against_dark', 'against_dragon',
       'against_electric', 'against_fairy', 'against_fight', 'against_fire',
       'against_flying', 'against_ghost', 'against_grass', 'against_ground',
       'against_ice', 'against_normal', 'against_poison', 'against_psychic',
       'against_rock', 'against_steel', 'against_water', 'attack',
       'base_egg_steps', 'base_happiness', 'base_total', 'capture_rate',
       'classfication', 'defense', 'experience_growth', 'height_m', 'hp',
       'japanese_name', 'name', 'percentage_male', 'pokedex_number',
       'sp_attack', 'sp_defense', 'speed', 'type1', 'type2', 'weight_kg',
       'generation', 'is_legendary'],
      dtype='object')
```