

# Basic graphics using GGPLOT2

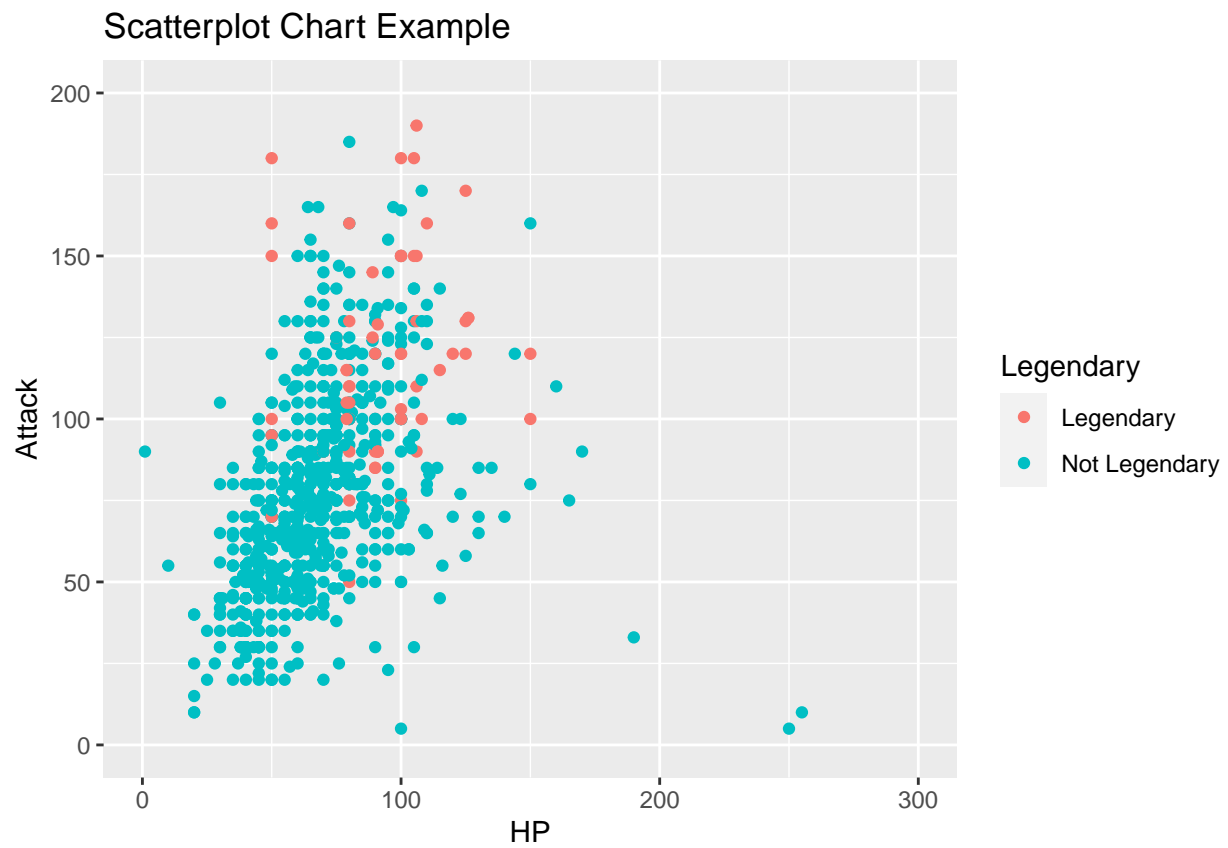
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```
# Packages used  
require(dplyr)  
require(ggplot2)
```

Everything I create, in my profile, in R I'll try to create as equal as possible in Python.

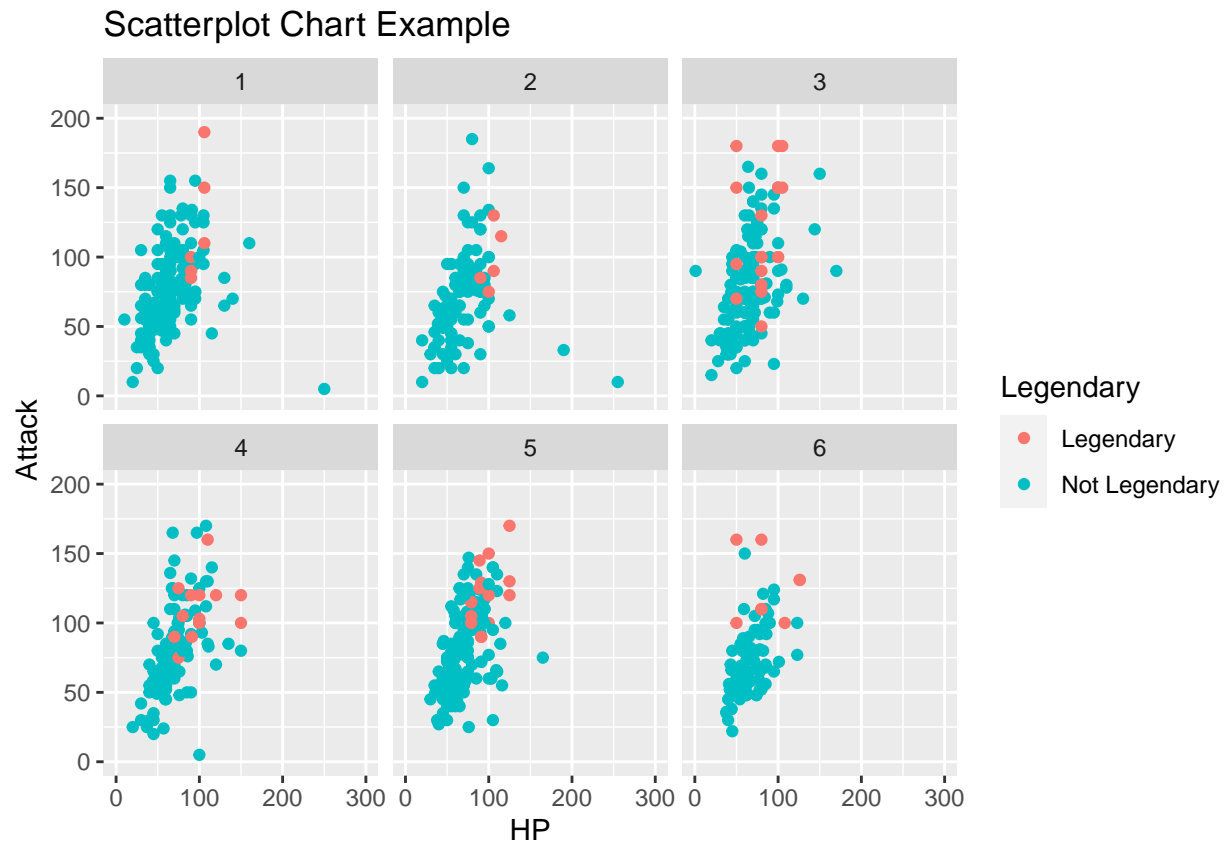
Data from: <https://www.kaggle.com/abcsds/pokemon>

```
# Pre-processing  
df = read.csv("Pokemon.csv")  
df$Legendary = ifelse(df$Legendary == 'False', 'Not Legendary', 'Legendary')  
  
# One Scatterplot Chart  
ggplot(data = df, aes(x = HP, y = Attack, color = Legendary)) + xlim(c(0, 300)) +  
  ylim(c(0, 200)) + geom_point() + labs(title = 'Scatterplot Chart Example')
```



```
# Several Scatterplot Chart
```

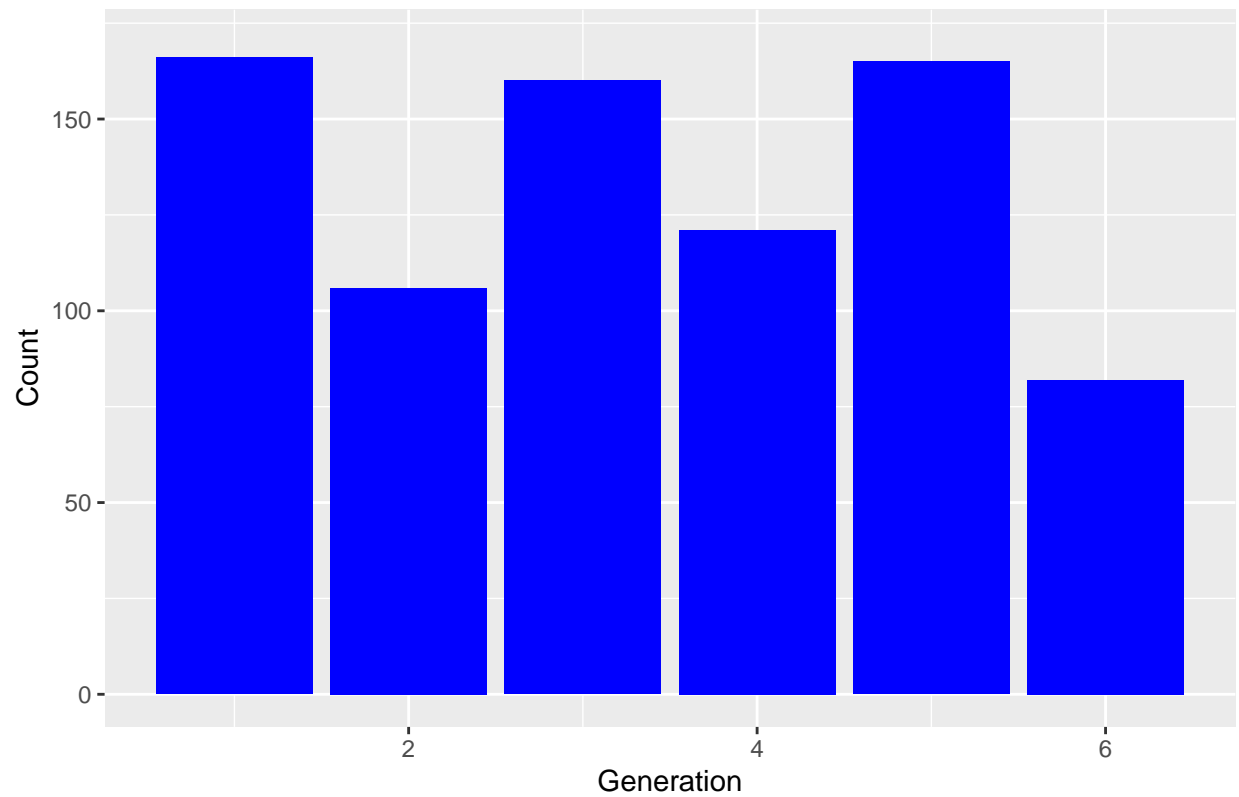
```
ggplot(data = df, aes(x = HP, y = Attack, color = Legendary)) + xlim(c(0, 300)) + ylim(c(0, 200)) +  
geom_point() + labs(title='Scatterplot Chart Example') + facet_wrap(~Generation)
```



```
# Bar Chart
```

```
ggplot(data = df, aes(x = Generation)) + geom_bar(fill = 'blue') + ylim(c(0, 170)) +  
labs(x = 'Generation', y = 'Count') + labs(title='Bar Chart Example')
```

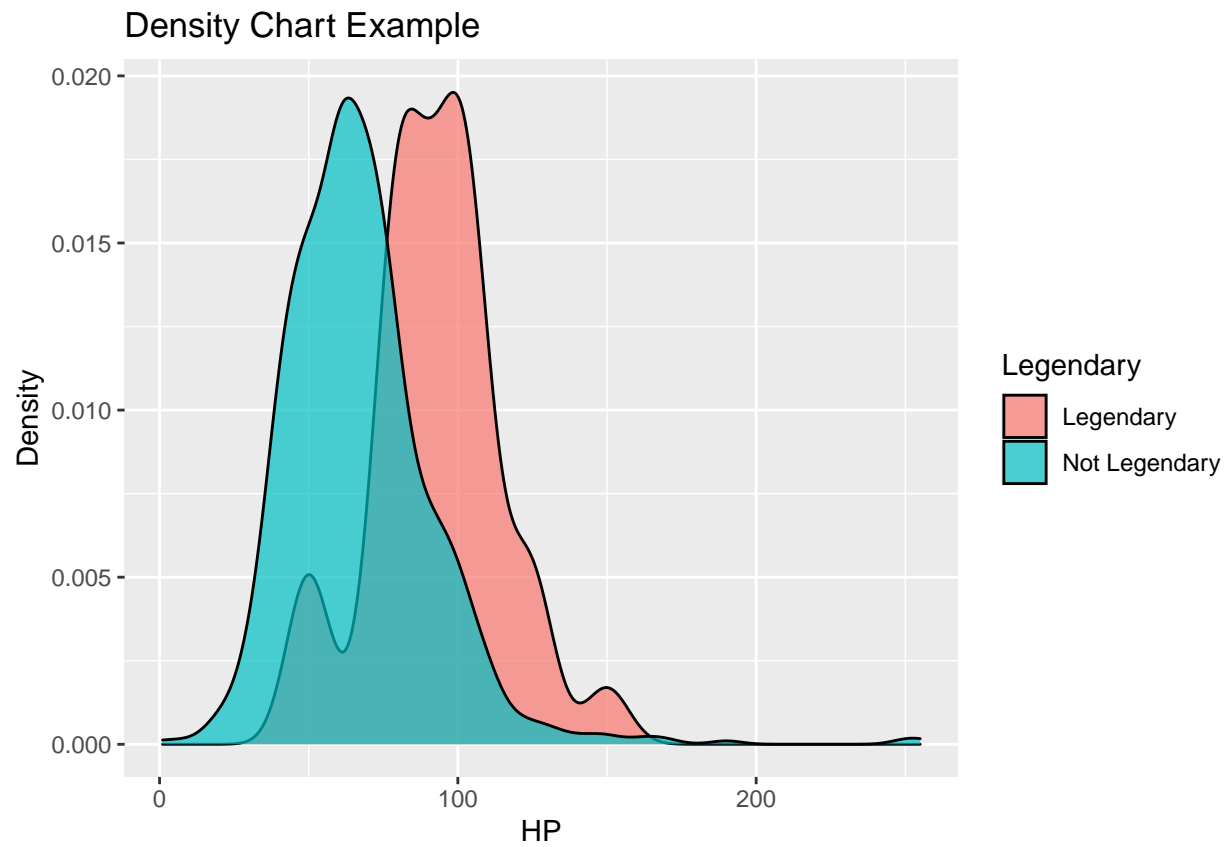
Bar Chart Example



```
# BoxPlot Chart  
ggplot(data = df, aes(x = Legendary, y = HP, fill = Legendary)) + geom_boxplot() +  
  labs(x = 'Legendary', y = 'HP') + labs(title='BoxPlot Chart Example') +  
  guides(fill = F)
```

A boxplot comparing the number of children for two groups: 'No children' (red) and 'At least one child' (teal). The y-axis represents the number of children, ranging from 0 to 10. The 'No children' group has a median of 0, with a box from 0 to 1 and whiskers extending from 0 to 2. A single outlier is present at 3. The 'At least one child' group has a median of 1, with a box from 1 to 2 and whiskers extending from 0 to 3. This group has numerous outliers, including values at 4, 5, 6, 7, 8, 9, and 10.

```
# Density Chart
ggplot(data = df, aes(x = HP)) + geom_density(aes(fill = Legendary), alpha = .7) +
  labs(title = 'Density Chart Example', y = 'Density')
```



```
# Histogram Chart  
ggplot(data = df, aes(x = HP)) + geom_histogram(binwidth = 15, fill = 'blue') +  
  labs(title = 'Histogram Chart Example', ylab = 'Count')
```

