

XP Booster

May 4, 2022

For this XP Boost you will be using the Pokémon dataset. You will be working SOLO.

1. How many pokémon of each type are there?
2. Summarize the average pokémon weight by primary and secondary type. Which has the highest average? Why could this statistic be considered poor?
3. Create a scatter plot of pokémon height vs. weight. Does there appear to be a linear relationship?
4. Create a relative bar graph showing the proportion of pokémon types in each category across generations. Is the distribution similar for each generation?
5. Are legendary pokémon 'stronger' than non-legendary pokémon. Give 2 arguments for them being stronger and 2 arguments for them not.

Solution:

```
1 #### Load packages and datasets
2 library(tidyverse)
3 library(ggplot2)
4 pok <- read.csv('data/datasets/pokemon.csv')
5
6 #### Question 1
7 pok %>% group_by(type1) %>% summarise(counts=n())
8
9 #### Question 2
10 pok %>% group_by(type1, type2) %>% summarise(counts=n(), average=mean(weight_kg))
11
12 #### Question 3
13 pok %>% ggplot(aes(x=height_m, y=weight_kg)) + geom_point()
14
15 #### Question 4
16 pok %>% ggplot(aes(x=factor(generation, fill=type1))) + geom_bar(position='fill')
```