The Heroes of Pymoli Jupyter Notebook takes the provided “purchase\_data” CSV and preforms multiple analyses on the history of in-game items purchased. The analyses are as follows: Total players, a breakdown of items purchased by gender, a breakdown of items purchased by age, a breakdown of the most profitable items by both dollars and number of times purchased.

When looking at the data we can see that men dominate the player base with 88% of players being male. Males also dominate most purchases, with 83.5% of purchases coming from Male players. When looking at age groups we see similar trends, most players fall in the age range of 15 to 29 years old. These are the same players that are purchasing items because 91% of all purchases are coming from the same age range, with 55% of purchases come from the 20- to 24-year-old age group. If we jump back up to our gender breakdown, we can also see that while a majority of our player base/purchasers are men, men actually spend less money on average per purchase when compared directly to female/non-disclosed.

A couple opportunities arise from our analysis. First, we need to try and increase purchase numbers from the female/other demographics, currently they make up only 14% of our purchases, but when those demographics do buy, they are willing to spend more per purchase, something we want to take advantage of. We can do this same analysis by age. If we look at players in the age groups “<10” and “35-39” we can see these players are willing to spend the most per purchase on in game items, but both are in the bottom 4 for total purchases, if we can find a way to boost purchases in those age groups it would lead to a bigger revenue increase.