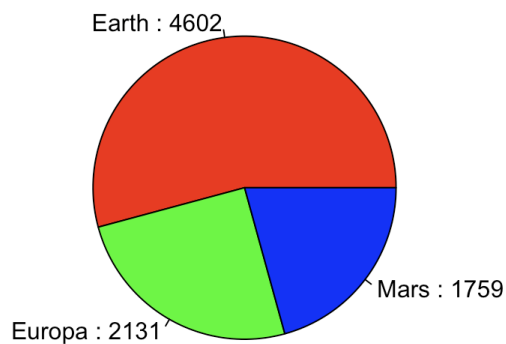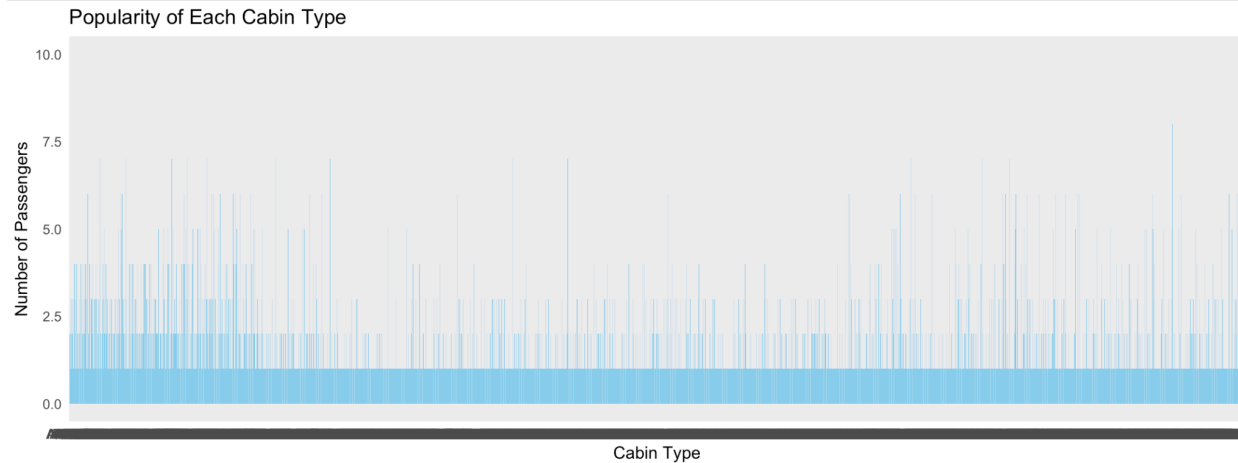R Project Write Up
Kelli Michaels

For this project I chose to work on the provided train.csv that contains information about passengers on a spaceship. The information includes the passengers' destination, home planet, cabin type, VIP status, spending on various amenities, and more. I will use my skills in R Studio to answer some questions about the data and in this report I will share my findings.

- What is the average passenger age?
    - Answer: 28.9 years
- What is the most popular destination?
    - Answer: TRAPPIST-1e
- What percentage of passengers used room service during their trip?
    - Answer: 34.5%
- Which of the five amenities (RoomService, FoodCourt, SoppingMall, Spa, VRDeck) is most popular? (note: based on transaction counts)
    - Answer: The spa is most popular
- Which of the five amenities brought in the most income? (now use actual values)
    - Answer: the food court brought in the most money
- Where do our passengers come from? Show a pie chart of their home planets.

Distribution of Passengers by Home Planet

    -
    - Most of our passengers are from Earth
- What are the most popular cabin types? Show a bar histogram of cabin type

Popularity of Each Cabin Type

- ○
  - ○ This looks like a mess!! It turns out that there are actually 6561 cabin types with no more than 10 people in each cabin type. This shows us that this was not a particularly useful question to ask. Sometimes what sounds like a good question is actually not very insightful.
- ● What individual spent the most total over the 5 amenities? Was that person a VIP?
  - ○ Answer: customer ID #6064_01 spent $35,987 total and they are not a VIP member. We should talk to them about becoming a member!

Through our analysis we were able to make some meaningful insights about the data. We learned that the amenities on board the ship were fairly popular and generated a lot of revenue. We learned that our passengers come from 3 different plants and are going to three different destinations. We also identified our top customer and their VIP status. In the future, it might be interesting to further investigate the cabin types. Perhaps the letters or other part of the naming can give us categories or areas of the ship to sort by. I would like to know about the different cabin types but just reading off the types and frequency was not very insightful.