

# Exercises for chapter 2

**Exercise 1 (AirCnC M&M) - open.** The AirCnC product manager for the “Mansions & Manors” category has just run an ad to encourage customers to “upgrade” and consider an M&M property for their next booking. When the results from the advertising campaign come back, the PM is disappointed to see that the booking rate is lower for customers who have seen the ad, even when filtering down to customers considering an M&M property only. Looking at the corresponding data, can you resolve that mystery? *(if that’s too open-ended for you, the next exercise guides you through intermediary steps)*

**Exercise 2 (AirCnC M&M) - guided.**

1. Understanding the behaviors.
  - a. What are the behavioral categories for the variables in the data?
  - b. Forgetting about the PM said, what is (are) the true, behavioral, goal(s) of the ad, i.e., what behavior(s) is it trying to drive?
  - c. Create any missing behavioral variable(s) you need and determine if the ad is driving these behaviors.
2. Resolving the mystery.
  - a. How does income affect these behaviors?
  - b. What is the average income of customers considering an M&M property after seeing the ad? Without seeing the ad?
  - c. Can you now explain to the PM what happened?