**Ski to Sea: Which sport leg is most important?**

The Ski to Sea race is a multi-sport relay race held annually in Whatcom County, Washington. The race consists of seven legs in the order: cross-country skiing, downhill skiing or snowboarding, running, road biking, canoeing, mountain biking, and kayaking, with each leg representing a different outdoor sport. A team will consist of one person for each leg of the race, except for the canoe leg which has two paddlers per canoe. Racers are allowed to compete in multiple legs of the race. A team must have a minimum of three racers and a maximum of eight, with a maximum of three legs per individual. The canoe leg must have two participants regardless of the number or racers per team. The Ski to Sea Race does not allow individuals to complete all legs of the race.

Complete the following questions using the Ski\_to\_Sea\_Data.csv:

1. Using the data, make a correlation table and find the correlation between Road Biking and Overall time.
2. Make a plot and report the relationship between the 2 variables.
3. Between which leg and overall time is the correlation the weakest?
4. Think about why this correlation may be the lowest.
5. In general, what is a better indicator of a team's success in the Ski to Sea race, their performance in the downhill skiing leg or the biking leg? Why do you think this?
6. Make a correlation table for only 2019 results. Which race leg demonstrates the strongest correlation with the overall finish time this year?
7. How do the correlations for 2019 compare to the overall correlation table?
8. What leg is most correlated with overall time? Why might this leg have a stronger correlation?