L7: Dataframes Lab

Complete the following exercises in R. Work in your small group to solve them. For each question, first write the code on the paper and once you have completed the whole sheet you can use R to evaluate yourself and see if the code worked as expected. Your end result should be a knitted RMarkdown file (Word preferred).

1. How could we create a dataframe in R that recreates the following table:

worker	area	items_sold	target_met
Alice	East	120	TRUE
Brian	West	95	FALSE
Carlos	North	130	TRUE
Danielle	South	110	TRUE
Evelyn	East	85	FALSE
Frank	West	140	TRUE

2. Using the dataframe that you created above, write the code to answer the following questions:

   (a) What is the dimension of the dataframe?

   (b) What is the structure of the dataframe?

   (c) How many rows and how many columns are in the dataframe?

   (d) How can we change the column names to be "Employee", "Region", "Sales", "Bonus" respectively

3. Using the dataframe that you made above, write the code to answer to answer the following questions:

   (a) How can we view just the 1st, 4th, and 6th observation?

   (b) How can we view just the 1st and 2nd columns?

   (c) How can we view every observation but the 3rd? Do this using 2 different methods

4. Using the dataframe that you made above, write the code to answer to answer the following questions:

   (a) Without using index-selection brackets, how can we display all of the "Sales" numbers?

   (b) Using this same idea, how can we determine the number of employees who had more than 100 sales?

   (c) How can we display the employees who had more than 100 sales?

   (d) How can we display all of the employees from either the East or South region?

   (e) How can we display all of the employees who's name ends in an "e" or "n" and had more than 90 sales?

   (f) What is the mean number of sales for the people you found in part (e)?