Module 02 – Transportation Modeling

Exploratory Data Analysis

In this section, you should perform some data analysis on the data provided to you. Please format your findings in a visually pleasing way and please be sure to include these cuts:

- The locations involved in the analysis (id -> name) and specify if they are a source or a destination
- A table of the average cost between source and destination (for the sake of this assignment, we are dealing with sugar-miles similar to the bushel-mile example from the textbook)

Model Formulation

Write the formulation of the model into here prior to implementing it in your Excel model. Be explicit with the definition of the decision variables, objective function, and constraints

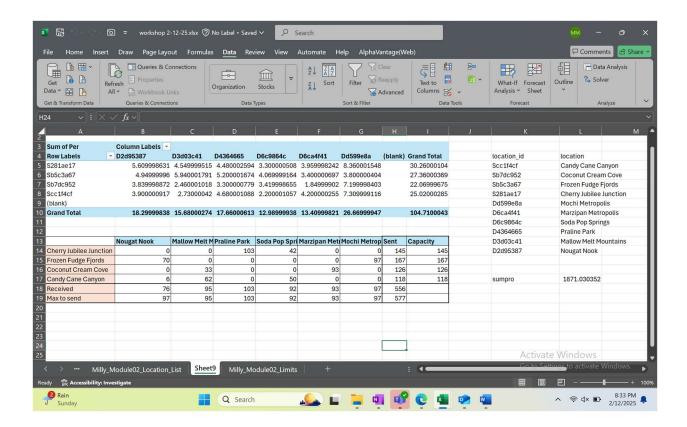
Model Optimized for Profit

Implement your formulation into Excel and be sure to make it neat. This section should include:

- A screenshot of your optimized final model (formatted nicely, of course)
- A text explanation of what your model is recommending

Model with Stipulation

Please copy the tab of your original model before continuing with the next part to avoid messing up your original solution. What happens if you add an additional constraint to the model such that all demand **MUST** be met. Is the solution still feasible? If not, please explain why.



We lack the capacity to fill demand. Locations such as Candy Cane Canyon, Coconut Cream Cove, Frozen Fudge Fjords, and Cherry Jubilee Junction are fully utilizing their capacity, while Mochi Metropolis has a recorded demand of 97 units but lacks a stated maximum capacity. Formula for the sum product, =SUMPRODUCT(B5:G8,B14:G17)