a)Screenshot of the report

A screenshot of a computer

Description automatically generated

b) To estimate the total weight of all cargo unloaded at the port in a day, we can use the Monte Carlo simulation results from part (a). The expected weight calculated in part (a) represents an estimate of the average total weight.

Therefore, the estimated total weight of all cargo, denoted as X, can be given by:

X = Estimated probability \* Expected weight=0.1150\*260 195.22= 29 922.45 tons

c)Estimated Standard deviation is 32 913.69 tons, regarding the Now, regarding the accuracy, it is important to note that the accuracy of the estimator depends on the number of simulations performed in the Monte Carlo study. A larger number of simulations generally leads to a more accurate estimate.

I used , **num\_simulations** = 100000 which is a relatively large number and should provide a reasonably accurate estimate for X and Std(X). However, the accuracy also depends on the underlying assumptions and distributions used in the simulation.