2.2) Confidence Interval increaseas with higher partitions and lower significance percentage (ie 95% yields higher confidence interval than 99%).



2.3)



**Optimal C occurs when C = 0.1**

2.4) From t-test analysis, the P-value and CI of all tests (left, right, and both) are within the 95% significance range, meaning that the null hypothesis CANNOT be reject as the difference is not deemed to be significant. As such, there cannot be a determination made as to which algorithm is better.



