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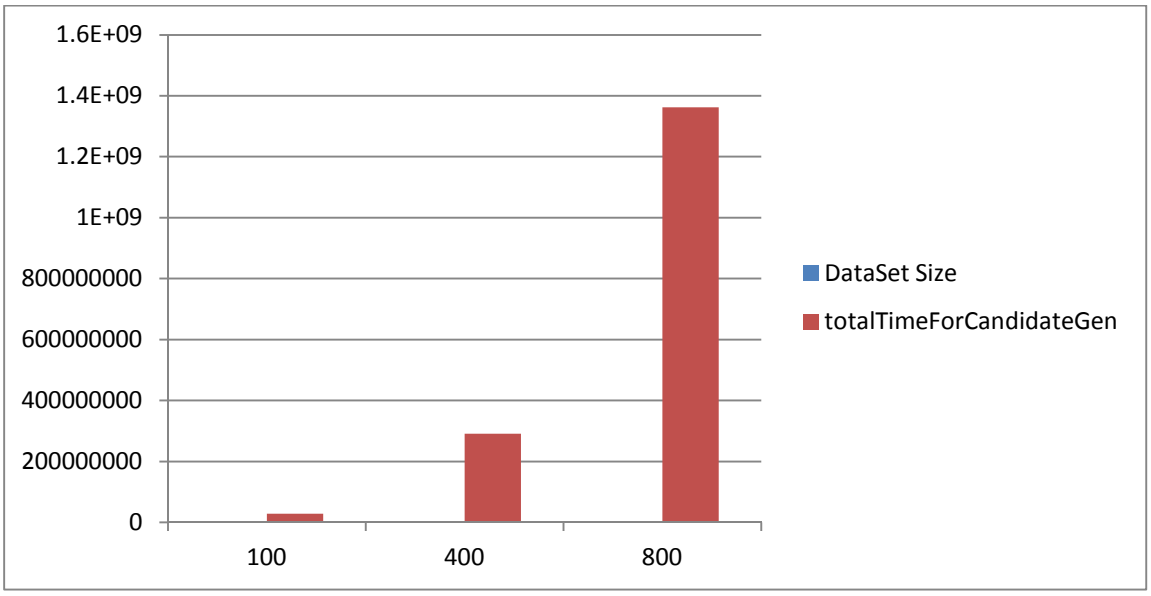
Assignment A3 Analysis:

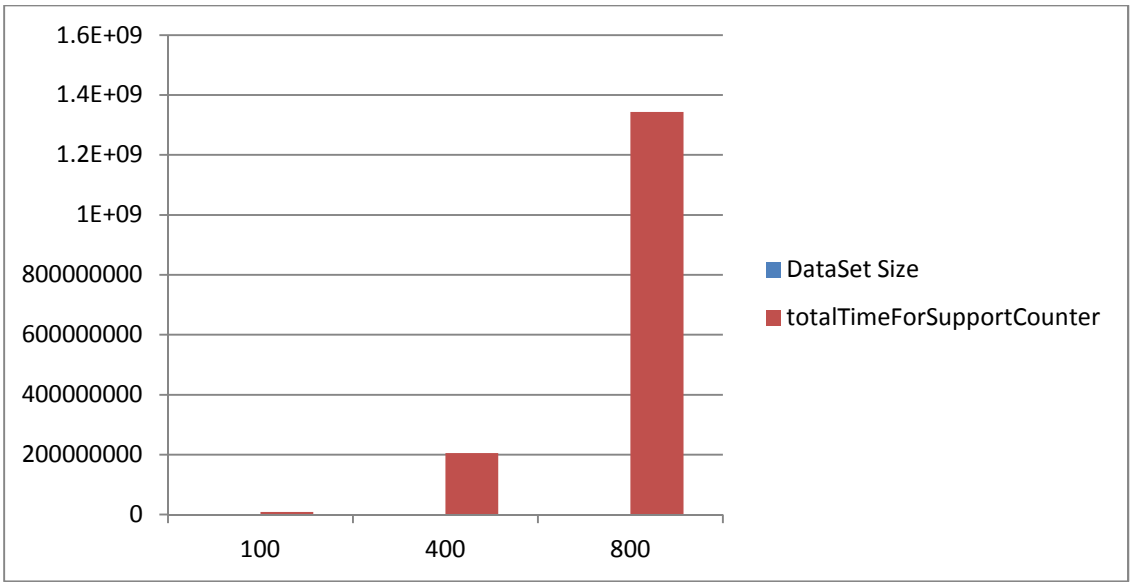
A. Test your application with ***dataset1***, ***dataset2*** and ***dataset3*** (***minSupport* =6**). Analyze the result according to **i** to **iii** below, and explain how the ***dataset size*** affects the ***computation time***.

Explanation: Increasing the datasize increases the computation time drastically.

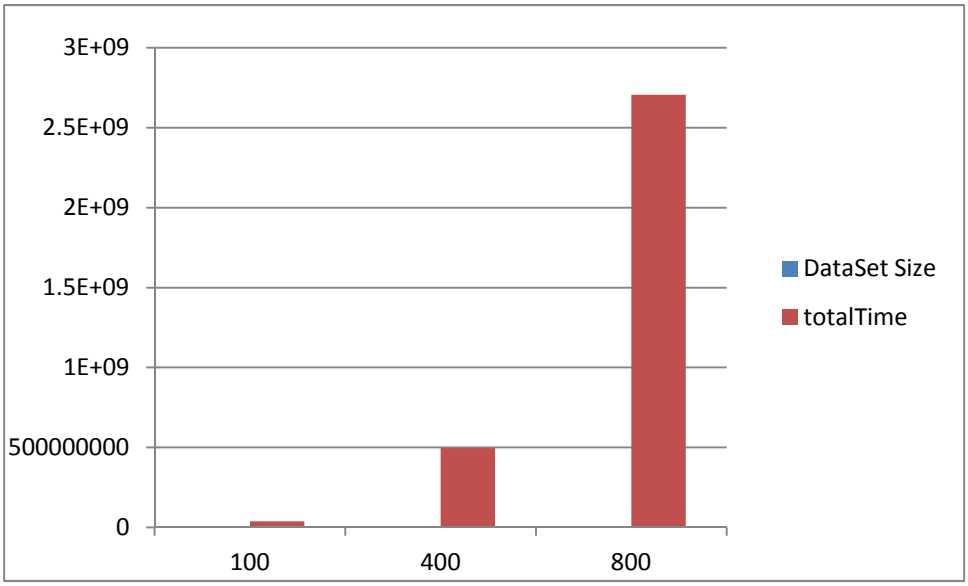
i. Draw a chart in which the Y axis shows the computation time in Nano seconds for the ***candidateGen*** component while the X axis shows the dataset size.



ii. Draw a chart in which the Y axis shows the computation time in Nano seconds for the ***SupportCounter*** component while the X axis shows the dataset size.



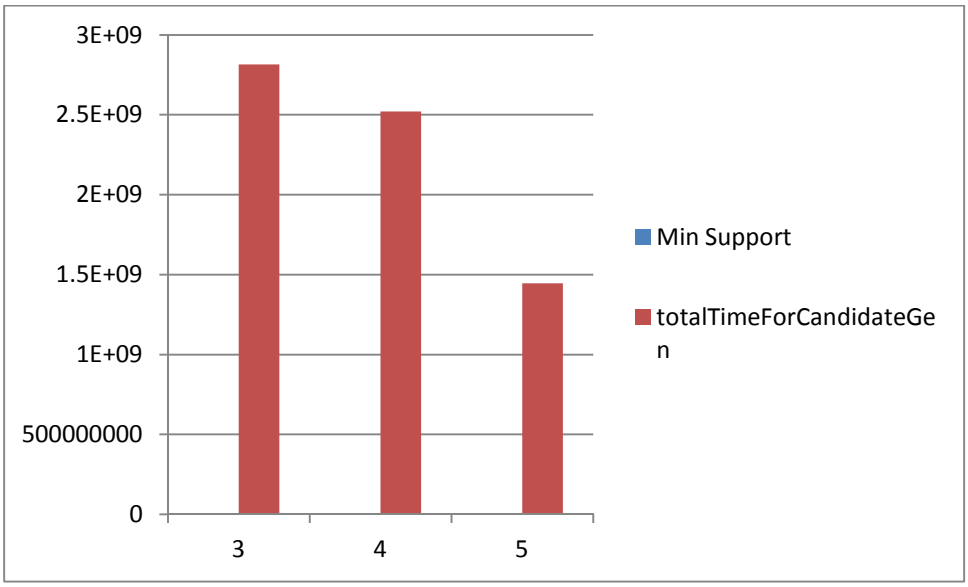
iii. Draw a chart in which the Y axis shows the ***total computation time*** in seconds (candidate generator + frequent pattern miner) while the X axis shows the dataset size.



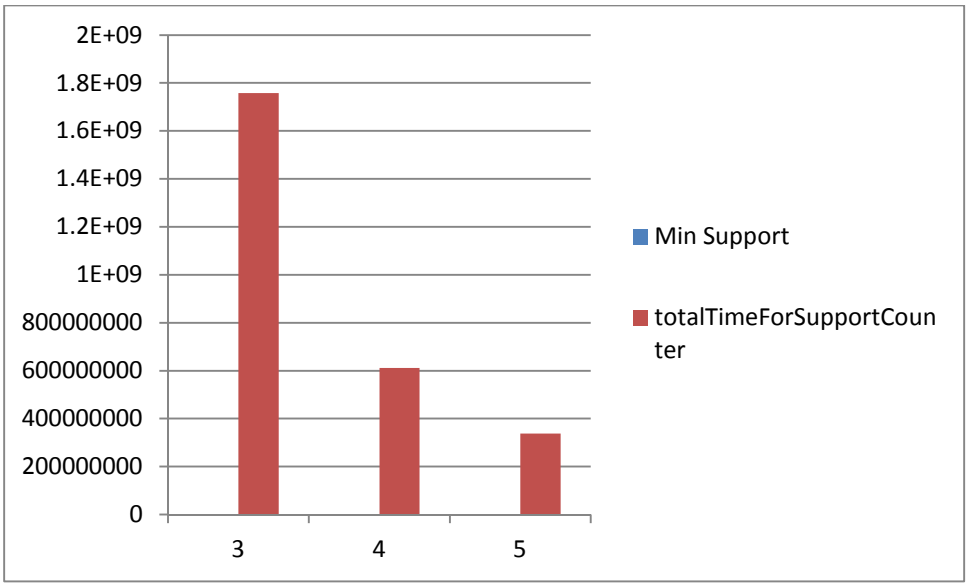
B. Test your application with ***minSupport = 3, 4, and 5*** (using ***dataset2***). Analyze the result according to **i** to **iii** below, explain how the ***minSupport*** value affects the ***computation time.***

Explanation: Increasing the Minimum Support decreases the computation time marginally.

i. Draw a chart in which the Y axis show the computation time in Nano seconds for the ***candidateGen*** component while the X axis shows the minSupport value.



ii. Draw a chart in which the Y axis show the computation time in seconds for the ***SupportCounter*** component while the X axis shows the minSupport value.



iii. Draw a chart in which the Y axis show the total computation time in Nano seconds while the X axis shows the minSupport value.