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Lab 5
2/11/15

7. Explain how adding the constant C to every data item in steps 4-6 should affect the sample variance in theory. Describe what you observed in practice for the two formulas.

Adding the constant C to every data item increased the size of the numbers that my calculations had to handle. The numbers became too large during the calculations for the one-pass variance. I encountered the cancellation error of subtracting 2 very large numbers. Therefore the one-pass variance calculations for larger C is wrong. However, the 2-pass variance calculations are still correct. Theoretically, adding to the constant C should not affect the variances. This is true for what happened in the 2-pass variance calculations.