

# cs677 homework 4

Vardaan Kishore

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Question 1

a: Based on lecture 6 we can compute the increase in memory bandwidth as  $\frac{9216}{1156}$   
= 7.97

Question 2:

If we would have used a 1d implementation we then can compute the increase in bandwidth as follows:

1D :  
 $\frac{32*3}{32+3-1} = \frac{96}{34} = 2.8$

Question 3:

For the boundary elements we will load it from global memory whenever things are out of bound.