LS2

Performance of Scalar Add

a) Run on Lonestar ..... model name: Intel® Xeon® CPU X5680 @ 3.33GHz

	L = 1	L = 2	L = 3	L = 4	L = 5	L = 6
K = 1	6.200649	6.202832	6.195387	6.188239	6.194977	2.854582
K = 2	0	1.457584	0	1.440764	0	1.443280
K = 3	0	0	0.984851	0	0	0.967557
K = 4	0	0	0	0.971399	0	0
K = 5	0	0	0	0	0.975325	0
K = 6	0	0	0	0	0	0.969997

The maximal performance was obtained for the values of K = 3 and L = 6 i.e., 0.967557.

Actually , when k=1 , l = 6 , latency = 3 , and cycles/issue = 1 the value should be greater than 3 but it is less than three .

Row-wise i.e., K constant and L increasing there is no improvement.

Column-wise i.e., k increasing and L constant there is improvement.

Even for any k and L values the peak value should never go below 1 but here the peak value is 0.967557.

LS2

b) Run on Lonestar. For K = 3 and L = 6

The CPU frequency is 3.33GHz and so the initially when the vector size is smaller the performance should have been somewhere around 3 but here It is not happening so. Why it should be like that is initially the vectors are filled in L1 cache thereby improving the access time but in when I ran the graph is completely contradicting.