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Arch 2 Hw 2,SIMD

Below we see the data I obtained from running codes that perform different multiplication throughout different sizes using Scaler(Ordinary) operation and Vector (using SSE instructions)

Vector- Vector Multiplication					
Input Size	Scaler	Vector	Improvement%		
128	0.00000	0.00000	1.853659		
256	0.00001	0.00000	1.953541		
512	0.00001	0.00000	2.152437		

Matrix- Vector Multiplication					
Input Size	Scaler	Vector	Improvement%		
128	0.000033	0.000016	2.020121		
256	0.000132	0.000060	2.179668		
512	0.000520	0.000231	2.255356		

Matrix- Matrix Multiplication					
Input Size	Scaler	Vector	Improvement%		
128	0.004771	0.002044	2.333614		
256	0.037737	0.015329	2.461749		
512	0.561957	0.217095	2.588531		

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