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HW02

For LU decomposition, the time complexity shall be $O(n^3)$ theoretically and we can observe from our data that as the matrix size doubles the operation time becomes almost 8 times longer since the third matrix(i.e. matrix of dimension 100). From the plot, it is also conspicuous that each of our execution time almost exactly lies on one the dots of n^3 .

Matrix Size	3	10	100	200	400	800	1600
Time	0	0	0.026	0.156	1.219	9.895	78.276

