

Aaron Templeton

U0734119

Assignment 3 – LU Decomposition

CS 3200

1) See matlab files lupDriver.m, lup.m, bsub.m, fsub.m

2) See matlab file TimingTests.m

2b) here is a plot of time for $N = 100$ and $\text{nrhs} = 50$

It is much faster to do the LU decomposition one time and compute the right-hand sides from the single LUP than to compute a new LUP for each right-hand side.

