

Exercise 1: compute Theoretical Peak performance for your laptop.

My laptop is a Lenovo ThinkPad Edge E550. The CPU is a Dual-core Intel i7 (5th generation) with a clock speed of 2.4 GHz. The number of floating point for cycle is 32 in DP, since the processor family is Broadwell-U. (<https://stackoverflow.com/questions/15655835/flops-per-cycle-for-sandy-bridge-and-haswell-sse2-avx-avx2/15657772#15657772>)

Hence, the Theoretical Peak performance is estimated as:

$$R_{\text{peak}} = 2.4 \times 2 \times 32 = 153.6 \text{ GFlops}$$

Exercise 1.1: compute R_{peak} for you phone.

I used the Mobile Linpack application for Android. My best result for a OnePlus 3 smartphone was 1064.39 MFlops, obtained with 1000 iterations of Linpack with a matrix size of 500 x 500.