**Problem 1.**

**When I allocate the device memory using cudaMalloc in nx = 15,000 & ny = 15,000. It tell me the error that you don’t have enough memory. So, to check the available memory, I use the cudaGetDeviceProperties API. And I knew that my gpu has 1.96 Gbytes (that is not enough to run the current program). So I reduce the problem size**