170050020
Kiran

N↓ Time(in sec) →	Serial Code	CUDA code	CUDA code
Block Size→	16	16	32
100	0.006	0.0018	0.00272
500	1.56	0.098	0.0885
1000	5.34	0.1407	0.114
2000	45.42	1.003	0.935
2500	90.22	2.87	2.43
5000	308.19	186.53	129.31

From above table we can depict that on using GPU cuda code gives very less amount of time than Serial code in HW2.
Another observation says that using gpu CUDA code with 32 block size has given lesser time than gpu CUDA code with 16 block size. It signifies that as we increase block size we allow the kernels to run as parallelly as possible.

MACHINE SPECIFICATIONS:
I used windows with wsl(Windows Subsystem for Linux (WSL)) which enabled me to install CUDA on it and run the code just like ubuntu.

NVIDIA GeForce 940MX :- 2 GB
8 GB RAM
OCTA core processor
Intel i7 8th Gen
Windows 10