SAURAV RAI
17558

AUM SRI SAI RAM

ARCHITECTURE OF THE GPU USED :

NAME : Tesla K20c
Memory:
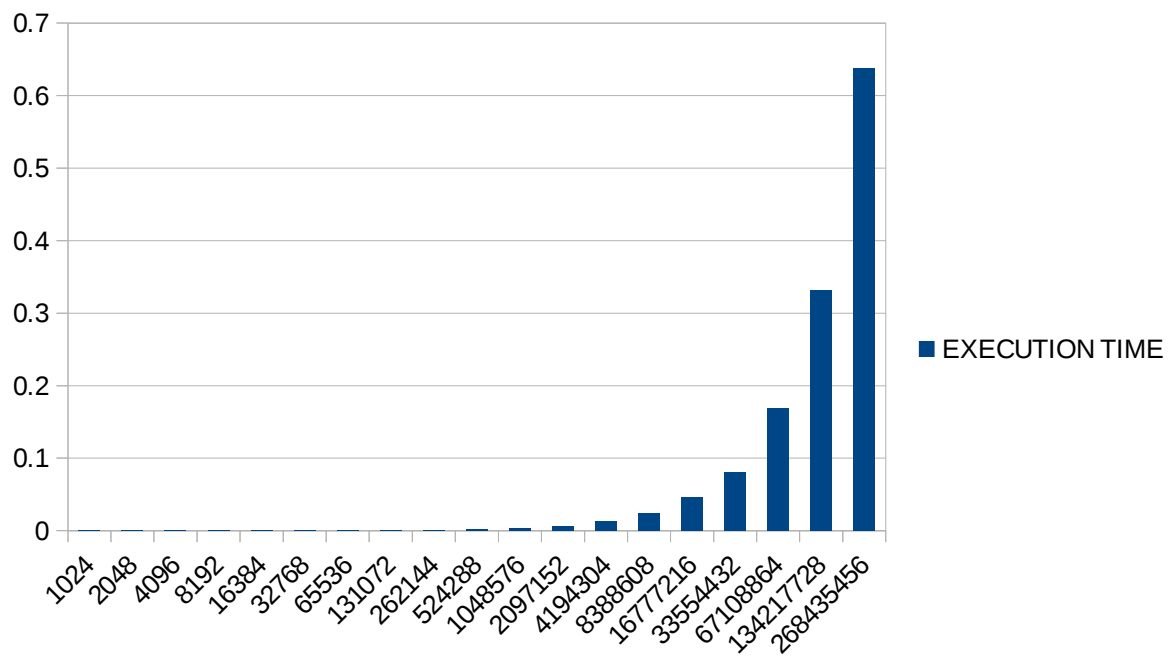   **Size:** 4742Mb , **Type:** GDDR5 SDRAM
    Bus: 320 bit , **Bandwidth:** 208.0 GBps

- Vector addition program is written in Cuda and implemented on the above gpu.
- Following table shows the execution time with respect to different vector size.

SIZE OF THE INPUT VECTOR	EXECUTION TIME
1024	0.00006
2048	0.00007
4096	0.00007
8192	0.00008
16384	0.00012
32768	0.00018
65536	0.00033
131072	0.00055
262144	0.00107
524288	0.00193
1048576	0.00346
2097152	0.00640
4194304	0.01249
8388608	0.02378
16777216	0.04658
33554432	0.08103
67108864	0.16921
134217728	0.33144
268435456	0.63699

NOTE:

• The following graph shows that as the size of the vector increases, its execution time goes on increasing exponentially.