ME5470 Introduction to Parallel Scientific Computing
HW-1
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Q1]
a)

```
vibhav@vibhav-XPS-15-9510:~/Study/Last Sem/HPCtry$ du -sh array_004000_asc.out
183M    array_004000_asc.out
vibhav@vibhav-XPS-15-9510:~/Study/Last Sem/HPCtry$ du -sh array_004000_bin.out
123M    array_004000_bin.out
```

The ASCII file has a size of 183MB, whereas the Binary file has size of 123MB.

b) Size of array in memory would be $8*n2$ bytes.

For n = 4000, the size of array in memory would be 128000000 bytes = 122.07 MB

We see that the size of array in memory is very close to the size on disk for the Binary file, by nearly 50%. This shows that the binary format is more suitable for storing large data