

Which Format is Best suited for saving larger files?

```
me24mtech11020@edison3:~/hw1-designerSampath$ du -sh array-004000-bin.out
62M      array-004000-bin.out
me24mtech11020@edison3:~/hw1-designerSampath$ vim q6.c
me24mtech11020@edison3:~/hw1-designerSampath$ gcc q6.c
me24mtech11020@edison3:~/hw1-designerSampath$ ./a.out
4000
contents written to the file name: array-004000-asc.out
me24mtech11020@edison3:~/hw1-designerSampath$ du -sh array-004000-asc.out
366M     array-004000-asc.out
```

- For a Size of $n = 4000$, 62MB is required to save the file in Binary format.
- For the same size, 366 MB is required to save the file in ASCII Format.

Size of Array in memory: $- 8 \times (4000)^2$
 $= 128000000 = 128MB.$

Conclusion:-

- Binary files are more Compact since they do not require any padding or conversion and takes up less space both in Disk and in memory.