note : somtimes sequential time differs at each runs but i write nearly **avg**. of all runs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Size** | | **Sequential**  **(ms)** | **Parallel**  **5 threads(ms)** | **Parallel**  **15 threads(ms)** | **Parallel**  **25 threads(ms)** | **Parallel**  **40 threads(ms)** |
| **25 bybte** | **Enc** | 0 ms | 2 ms | 1 ms | 2 ms | 3 ms |
| **Dec** | 0 ms | 1 ms | 0ms | 3 ms | 3 ms |
| **5 kbytes** | **Enc** | 5 | 1 | 2 | 3 | 3 |
| **Dec** | 3 | 1 | 2 | 4 | 4 |
| **1 MB** | **Enc** | 22 | 40 | 31 | 43 | 48 |
| **Dec** | 19 | 48 | 35 | 42 | 52 |
| **10MB** | **Enc** | 94 | 89 | 57 | 64 | 74 |
| **Dec** | 93 | 72 | 71 | 63 | 76 |
| **30MB** | **Enc** | 212 | 118 | 115 | 104 | 106 |
| **Dec** | 210 | 109 | 101 | 97 | 90 |

observation : with large file sizes and large thread number threading is much faster the sequential . because creating threads with small file size will create an uncessary overhead for **creating,starting,joing** the threads