|  |  |  |
| --- | --- | --- |
| **No. Of Orders** | **Single Thread** | **Multithread** |
| 5 | 63 | 52 |
| 15 | 99 | 83 |
| 25 | 127 | 122 |
| 50 | 228 | 183 |
| 100 | 371 | 274 |
| 200 | 515 | 393 |
| 500 | 1169 | 818 |

From the various testing, it can be confirmed that the processing times of Multithreading is faster than single-threaded applications. This is due to the fact that Multithreading runs orders in turns thus making it efficient. The Use of synchronizations and locks ensures that during the multithreading data races don’t occur. Though the table is a representation of the differences, to really see the magnitude of efficiency we must have large data sets. A reason why single-threaded programs are slowed is that it runs in a linear manner where each task is performed one after the other.