**Task 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| **N** | **Sequential Execution Time (S) (in seconds)** | **CUDA Kernel Execution Time (P) (in seconds)** | **Speed Up (S/P)** |
| 1024 | **9.8700000** | **0.00783200** | **1260.214504596** |
| 2048 | **130.69216919** | **0.05953000** | **2195.400120779** |
| 4096 | **1869.6978651** | **0.43044800** | **4343.609135365** |

**Task 2:**

|  |  |  |  |
| --- | --- | --- | --- |
| **N** | **CUDA Kernel Execution 1 Time (P1) (in seconds)** | **CUDA Kernel Execution 2 Time (P2) (in seconds)** | **CUDA Kernel Execution Time 3 (P3) (in seconds)** |
| 222 | **1.74649894** | **1.76500106** | **1.66982496** |
| 224 | **1.70805395** | **1.74983895** | **1.63623405** |
| 226 | **1.76152205** | **1.75620699** | **1.70336902** |