Program Structures and Algorithms

Fall 2023

Name : Anirudh Voruganti

NUID : 001092732

**Task** - Parallel Sorting

**Code**

Array Size – 1 million, 2 million and 3 million

Threads – powers of 2 (2 to 8)

A screenshot of a computer

Description automatically generated

A computer screen shot of a program

Description automatically generated

**Observations:**

****

**Graphs:**

Chart, line chart

Description automatically generated

Threads 2, 50% of the array size gives good cut off%

Chart, line chart

Description automatically generated

Threads 4, 25% of the array size gives good cutoff%

**Conclusion:**

Good Cut Off %= (array size / number of threads)\*100