DEPARTMENT OF INFORMATION TECHNOLOGY, NITK, SURATHKAL

Parallel Computing

Lab-3-19th August 2024

Note: Execute the following programs given below. Observe the results of each program, write the analysis of the results and take the screenshot of the results. Upload in the Moodle along with the code and screenshots of the results.

Total marks: 2+2+2+2+2 = 10

- 1. Write an OpenMP program to demonstrate <u>default clause</u> (default: shared) in parallel directive. Observe the results and analyze it.
- 2. Demonstrate the usage of <u>lastprivate() clause</u> in a parallel directive in an OpenMP program. Write your observation.
- 3. write an OpenMP program to demonstrate sharing of <u>section work</u> by performing arithmetic operations on one dimensional array by threads.
- 4. Write an OpenMP program to demonstrate <u>reduction</u> clause in a parallel directive. Write your observation.
- 5. Write a parallel program to find the minimum number in a given array. Use '<u>for'</u> directive for the same along with <u>reduction clause</u>. Write the code, execution results and your observation.

6. write an OpenMP program to demonstrate

sharing of section work by

7. performing arithmetic operations on one dimensional array by thread