

# Examples screenshot

## Example#1:

Before the parallel region:-

Value returned by in\_parallel: 0

Inside parallel region:-

Value returned by in\_parallel: 1

The total number of processors in the system: 4

get\_max\_threads function returns: 4

Thread limit: 2147483647

Enter the number of threads to be run in the parallel region:7

Total number of threads: 4

Setting total number of threads to 7...

Total number of threads after setting: 7

Sequence of execution of threads: 3 1 2 0 4 5 6

Current maximum active levels: 2147483647

Setting maximum active levels to 15

After setting, maximum active levels: 15

Number of nested parallel region: 1

Number of active, nested parallel region: 1

Value of get\_nested before: 0

Setting value of get nested to 3.

Value of get\_nested after setting: 1

Locks:

Initializing a lock using init\_lock()..

Setting the lock using set\_lock()

Unsetting the lock using unset\_lock()

Destroying the lock using destroy\_lock()..

Teams:

Number of teams: 0

Team number: 0

Dynamic:

Value returned by get\_dynamic: 0

Setting dynamic threads to 1...

Value returned by get\_dynamic after setting: 1

Setting dynamic threads back to 0 ...

## Example#2:

Enter the number of rows of first matrix:3

Enter the number of columns of first matrix:3

Enter the number of rows of second matrix:3

Enter the number of columns of second matrix:3

Enter the first matrix:[1,2,3;4,5,6;7,8,9;]

Enter the second matrix:[7,8,9;4,5,6;1,2,3;]

Matrix multiplication:

Matrix A:

|    |    |    |
|----|----|----|
| 1. | 2. | 3. |
| 4. | 5. | 6. |
| 7. | 8. | 9. |

Matrix B:

|    |    |    |
|----|----|----|
| 7. | 8. | 9. |
| 4. | 5. | 6. |
| 1. | 2. | 3. |

Product of the matrices using OpenMp (mat\_mul function):

|     |      |      |
|-----|------|------|
| 18. | 24.  | 30.  |
| 54. | 69.  | 84.  |
| 90. | 114. | 138. |

Total time taken for program execution: 29.72 s