**Assignment 7 (Problem 1.1)**

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**Output 1:**

Input Number of Threads = 2

Input factorial (n) = 3

**Execution 1:**

Input Number of Threads = 2

Input factorial (n) = 3

Starting task Task 1 at 11: 16: 45: 312

Starting task Task 0 at 11: 16: 45: 312

Ending task Task 1 at 11: 16: 45: 312 after 0 milliseconds

Ending task Task 0 at 11: 16: 45: 312 after 0 milliseconds

**Execution 2:**

Input Number of Threads = 2

Input factorial (n) = 3

Starting task Task 1 at 12: 10: 33: 675

Starting task Task 0 at 12: 10: 33: 675

Ending task Task 1 at 12: 10: 33: 675 after 0 milliseconds

Ending task Task 0 at 12: 10: 33: 675 after 0 milliseconds

**Execution 3:**

Input Number of Threads = 2

Input factorial (n) = 3

Starting task Task 0 at 12: 19: 07: 080

Starting task Task 1 at 12: 19: 07: 080

Ending task Task 0 at 12: 19: 07: 080 after 0 milliseconds

Ending task Task 1 at 12: 19: 07: 080 after 0 milliseconds

**Output 2:**

Input Number of Threads = 15

Input factorial (n) = 5

**Execution 1:**

Input Number of Threads = 15

Input factorial (n) = 5

Starting task Task 7 at 14: 00: 43: 953

Ending task Task 7 at 14: 00: 43: 953 after 0 milliseconds

Starting task Task 2 at 14: 00: 43: 953

Ending task Task 2 at 14: 00: 43: 953 after 0 milliseconds

Starting task Task 11 at 14: 00: 43: 953

Starting task Task 13 at 14: 00: 43: 953

Starting task Task 10 at 14: 00: 43: 953

Ending task Task 13 at 14: 00: 43: 953 after 0 milliseconds

Starting task Task 1 at 14: 00: 43: 953

Starting task Task 3 at 14: 00: 43: 953

Starting task Task 12 at 14: 00: 43: 953

Ending task Task 3 at 14: 00: 43: 953 after 0 milliseconds

Starting task Task 4 at 14: 00: 43: 953

Starting task Task 14 at 14: 00: 43: 953

Ending task Task 4 at 14: 00: 43: 953 after 0 milliseconds

Starting task Task 6 at 14: 00: 43: 953

Starting task Task 8 at 14: 00: 43: 953

Ending task Task 6 at 14: 00: 43: 953 after 0 milliseconds

Starting task Task 9 at 14: 00: 43: 953

Ending task Task 8 at 14: 00: 43: 953 after 0 milliseconds

Ending task Task 9 at 14: 00: 43: 953 after 0 milliseconds

Ending task Task 14 at 14: 00: 43: 953 after 0 milliseconds

Ending task Task 1 at 14: 00: 43: 953 after 0 milliseconds

Ending task Task 12 at 14: 00: 43: 953 after 0 milliseconds

Ending task Task 10 at 14: 00: 43: 953 after 0 milliseconds

Ending task Task 11 at 14: 00: 43: 953 after 0 milliseconds

Starting task Task 0 at 14: 00: 43: 953

Starting task Task 5 at 14: 00: 43: 953

Ending task Task 5 at 14: 00: 43: 968 after 15 milliseconds

Ending task Task 0 at 14: 00: 43: 968 after 15 milliseconds

**Execution 2:**

Input Number of Threads = 15

Input factorial (n) = 5

Starting task Task 9 at 12: 13: 46: 004

Starting task Task 3 at 12: 13: 46: 004

Starting task Task 4 at 12: 13: 46: 004

Ending task Task 3 at 12: 13: 46: 004 after 0 milliseconds

Starting task Task 14 at 12: 13: 46: 004

Starting task Task 12 at 12: 13: 46: 004

Starting task Task 6 at 12: 13: 46: 004

Starting task Task 8 at 12: 13: 46: 004

Ending task Task 6 at 12: 13: 46: 019 after 15 milliseconds

Ending task Task 8 at 12: 13: 46: 019 after 15 milliseconds

Starting task Task 5 at 12: 13: 46: 004

Ending task Task 12 at 12: 13: 46: 019 after 15 milliseconds

Starting task Task 13 at 12: 13: 46: 004

Starting task Task 7 at 12: 13: 46: 004

Starting task Task 0 at 12: 13: 46: 004

Starting task Task 10 at 12: 13: 46: 004

Ending task Task 13 at 12: 13: 46: 019 after 15 milliseconds

Ending task Task 5 at 12: 13: 46: 019 after 15 milliseconds

Ending task Task 14 at 12: 13: 46: 004 after 0 milliseconds

Ending task Task 4 at 12: 13: 46: 004 after 0 milliseconds

Starting task Task 11 at 12: 13: 46: 004

Ending task Task 9 at 12: 13: 46: 004 after 0 milliseconds

Ending task Task 11 at 12: 13: 46: 019 after 15 milliseconds

Starting task Task 1 at 12: 13: 46: 004

Starting task Task 2 at 12: 13: 46: 004

Ending task Task 10 at 12: 13: 46: 019 after 15 milliseconds

Ending task Task 0 at 12: 13: 46: 019 after 15 milliseconds

Ending task Task 7 at 12: 13: 46: 019 after 15 milliseconds

Ending task Task 2 at 12: 13: 46: 019 after 15 milliseconds

Ending task Task 1 at 12: 13: 46: 019 after 15 milliseconds

**Execution 3:**

Input Number of Threads = 15

Input factorial (n) = 5

Starting task Task 14 at 12: 20: 35: 941

Starting task Task 3 at 12: 20: 35: 941

Ending task Task 14 at 12: 20: 35: 941 after 0 milliseconds

Starting task Task 2 at 12: 20: 35: 941

Starting task Task 5 at 12: 20: 35: 941

Starting task Task 13 at 12: 20: 35: 941

Ending task Task 5 at 12: 20: 35: 941 after 0 milliseconds

Starting task Task 12 at 12: 20: 35: 941

Starting task Task 8 at 12: 20: 35: 941

Ending task Task 12 at 12: 20: 35: 941 after 0 milliseconds

Ending task Task 13 at 12: 20: 35: 941 after 0 milliseconds

Ending task Task 2 at 12: 20: 35: 941 after 0 milliseconds

Starting task Task 4 at 12: 20: 35: 941

Starting task Task 6 at 12: 20: 35: 941

Ending task Task 4 at 12: 20: 35: 941 after 0 milliseconds

Starting task Task 7 at 12: 20: 35: 941

Ending task Task 7 at 12: 20: 35: 941 after 0 milliseconds

Starting task Task 11 at 12: 20: 35: 941

Starting task Task 9 at 12: 20: 35: 941

Ending task Task 11 at 12: 20: 35: 941 after 0 milliseconds

Ending task Task 9 at 12: 20: 35: 941 after 0 milliseconds

Starting task Task 10 at 12: 20: 35: 941

Ending task Task 3 at 12: 20: 35: 941 after 0 milliseconds

Ending task Task 10 at 12: 20: 35: 941 after 0 milliseconds

Starting task Task 1 at 12: 20: 35: 941

Ending task Task 6 at 12: 20: 35: 941 after 0 milliseconds

Starting task Task 0 at 12: 20: 35: 941

Ending task Task 8 at 12: 20: 35: 941 after 0 milliseconds

Ending task Task 0 at 12: 20: 35: 941 after 0 milliseconds

Ending task Task 1 at 12: 20: 35: 941 after 0 milliseconds

**Output 3:**

Input Number of Threads = 8

Input factorial (n) = 2

**Execution 1:**

Input Number of Threads = 8

Input factorial (n) = 2

Starting task Task 7 at 11: 19: 19: 061

Ending task Task 7 at 11: 19: 19: 077 after 16 milliseconds

Starting task Task 5 at 11: 19: 19: 079

Starting task Task 4 at 11: 19: 19: 079

Ending task Task 5 at 11: 19: 19: 079 after 0 milliseconds

Ending task Task 4 at 11: 19: 19: 080 after 1 milliseconds

Starting task Task 3 at 11: 19: 19: 079

Starting task Task 6 at 11: 19: 19: 080

Ending task Task 3 at 11: 19: 19: 080 after 1 milliseconds

Ending task Task 6 at 11: 19: 19: 081 after 1 milliseconds

Starting task Task 2 at 11: 19: 19: 082

Starting task Task 1 at 11: 19: 19: 082

Ending task Task 2 at 11: 19: 19: 082 after 0 milliseconds

Starting task Task 0 at 11: 19: 19: 082

Ending task Task 1 at 11: 19: 19: 082 after 0 milliseconds

Ending task Task 0 at 11: 19: 19: 082 after 0 milliseconds

**Execution 2:**

Input Number of Threads = 8

Input factorial (n) = 2

Starting task Task 6 at 12: 17: 10: 150

Starting task Task 1 at 12: 17: 10: 166

Starting task Task 3 at 12: 17: 10: 150

Ending task Task 6 at 12: 17: 10: 166 after 16 milliseconds

Ending task Task 3 at 12: 17: 10: 166 after 16 milliseconds

Starting task Task 0 at 12: 17: 10: 150

Starting task Task 2 at 12: 17: 10: 150

Starting task Task 5 at 12: 17: 10: 150

Starting task Task 7 at 12: 17: 10: 150

Starting task Task 4 at 12: 17: 10: 150

Ending task Task 7 at 12: 17: 10: 166 after 16 milliseconds

Ending task Task 5 at 12: 17: 10: 166 after 16 milliseconds

Ending task Task 2 at 12: 17: 10: 166 after 16 milliseconds

Ending task Task 0 at 12: 17: 10: 166 after 16 milliseconds

Ending task Task 1 at 12: 17: 10: 166 after 0 milliseconds

Ending task Task 4 at 12: 17: 10: 166 after 16 milliseconds

**Execution 3:**

Input Number of Threads = 8

Input factorial (n) = 2

Starting task Task 4 at 12: 20: 09: 185

Starting task Task 5 at 12: 20: 09: 185

Starting task Task 6 at 12: 20: 09: 185

Starting task Task 7 at 12: 20: 09: 185

Ending task Task 6 at 12: 20: 09: 185 after 0 milliseconds

Ending task Task 7 at 12: 20: 09: 185 after 0 milliseconds

Ending task Task 4 at 12: 20: 09: 185 after 0 milliseconds

Ending task Task 5 at 12: 20: 09: 185 after 0 milliseconds

Starting task Task 3 at 12: 20: 09: 185

Starting task Task 2 at 12: 20: 09: 185

Ending task Task 3 at 12: 20: 09: 185 after 0 milliseconds

Ending task Task 2 at 12: 20: 09: 185 after 0 milliseconds

Starting task Task 1 at 12: 20: 09: 185

Starting task Task 0 at 12: 20: 09: 185

Ending task Task 1 at 12: 20: 09: 185 after 0 milliseconds

Ending task Task 0 at 12: 20: 09: 185 after 0 milliseconds