Parallel and Distributed Computing
CSE4001
Fall Semester 2020-21

Lab Assignment 3

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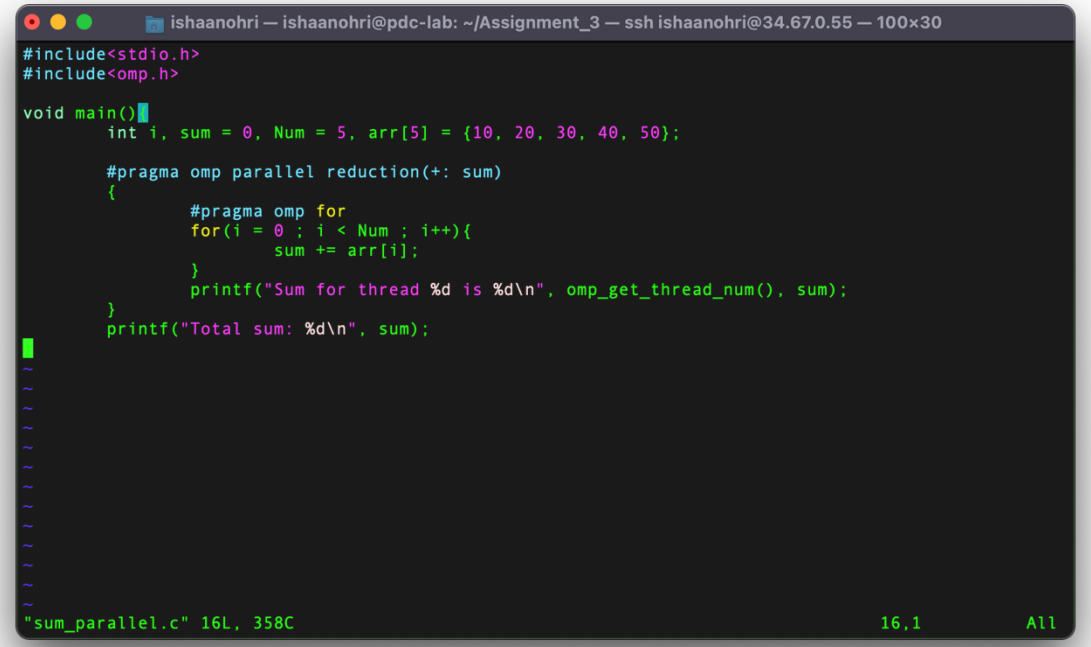
Aim:

Write a simple OpenMP program to demonstrate the use of reduction and critical clause

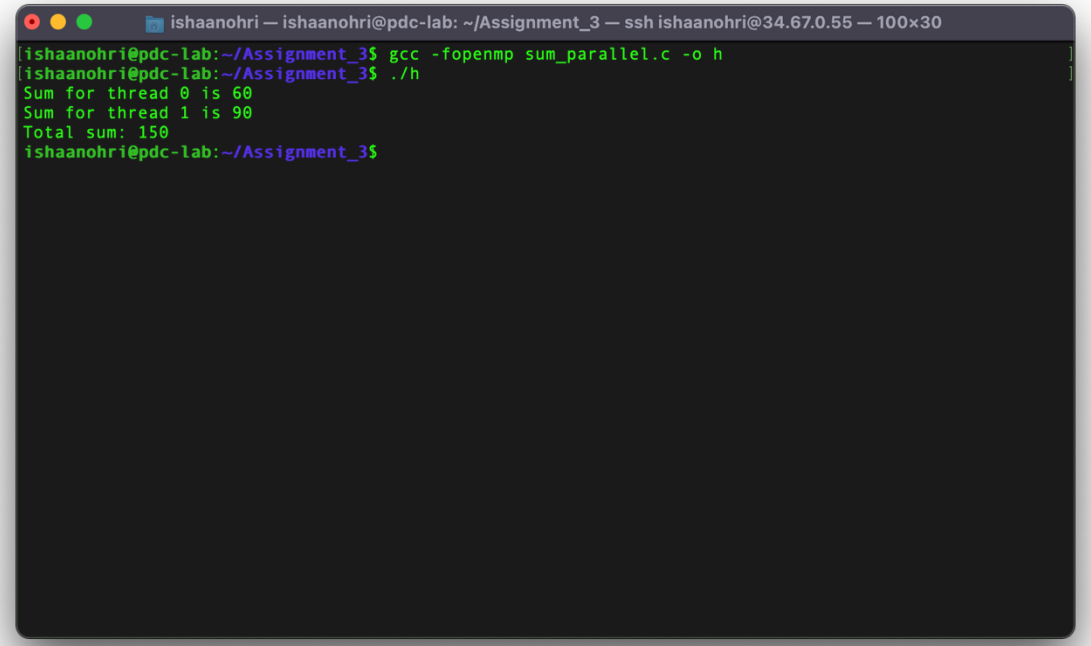
- Sum of 'n' array Using Reduction Clause
- Product of 'n' array using Reduction Clause
- Show a suitable example for Critical Clause

sum using reduction clause

Source Code:

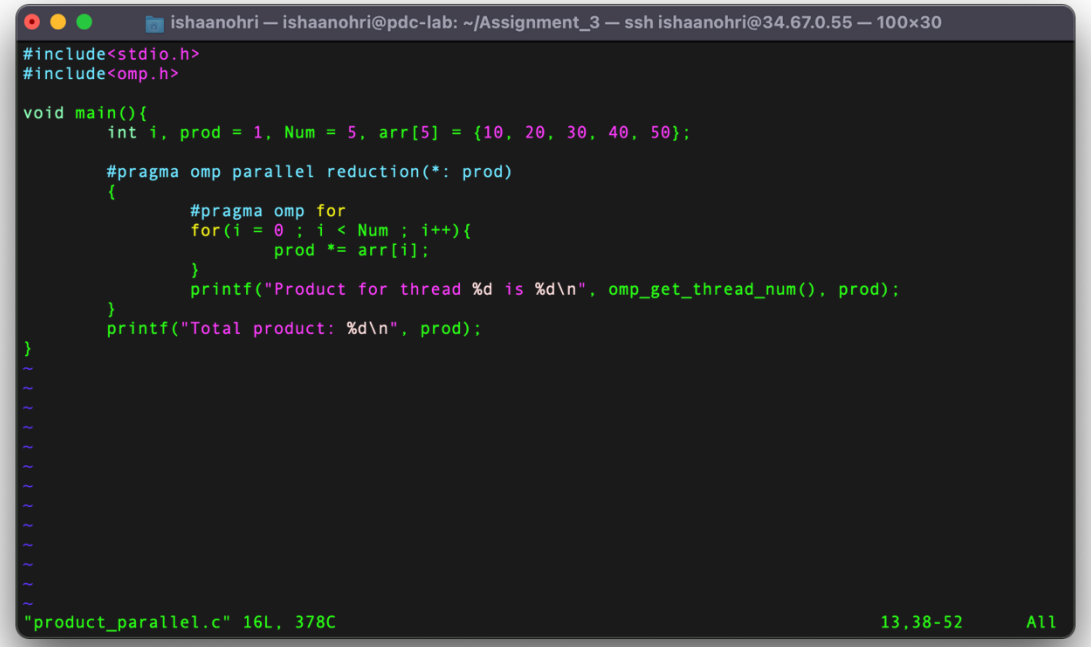


Execution:

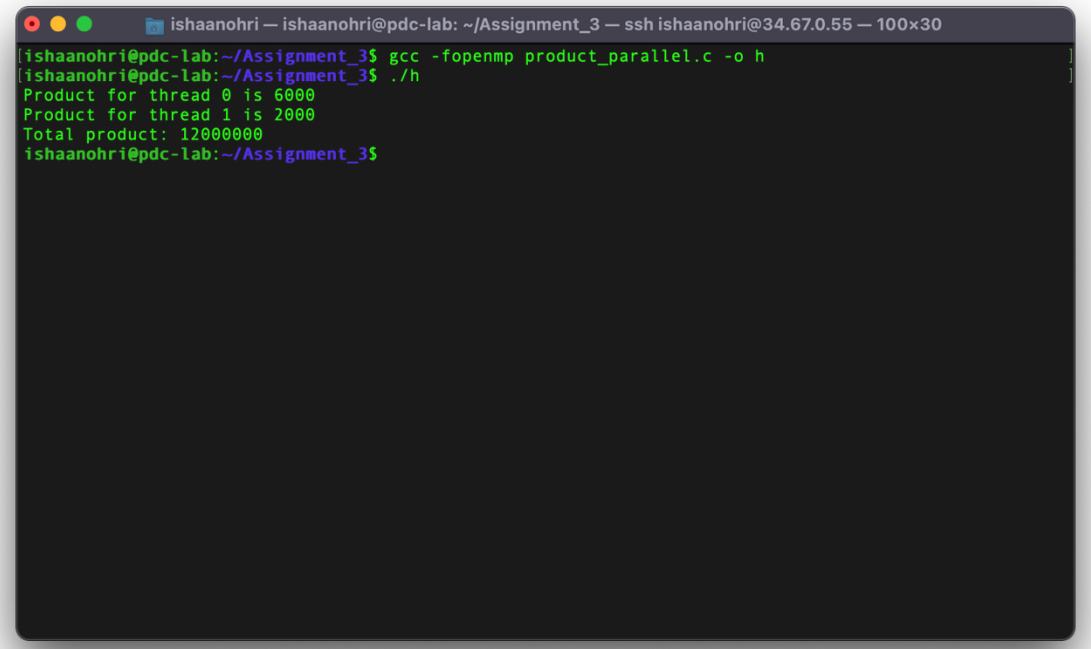


product using reduction clause

Source Code:

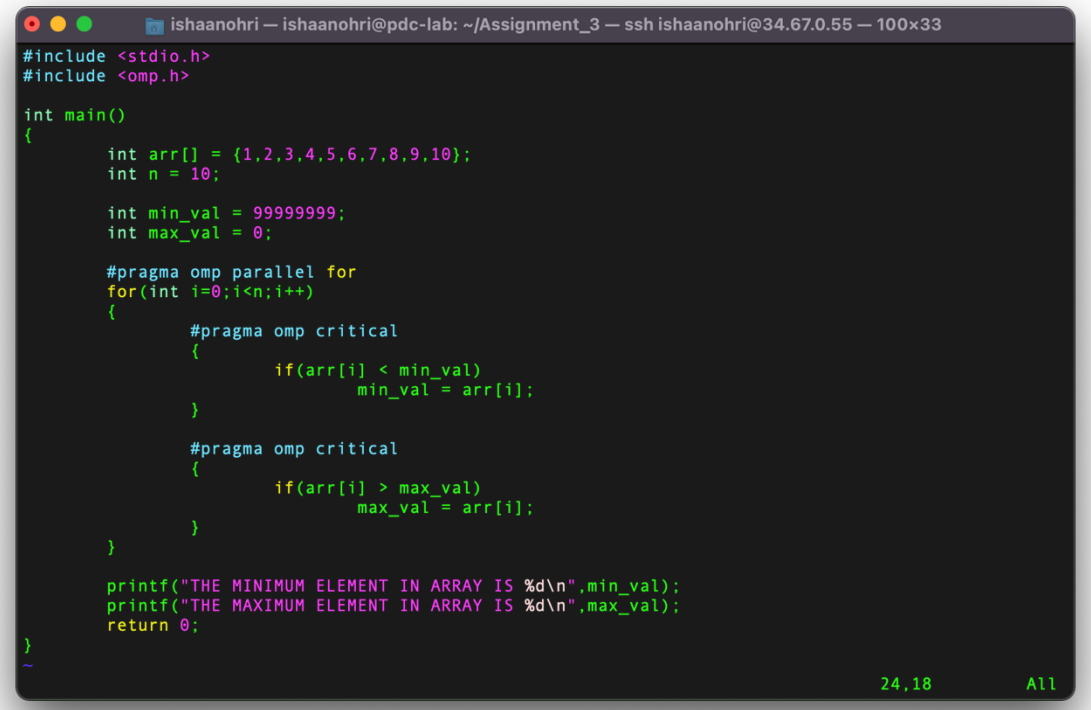


Execution:

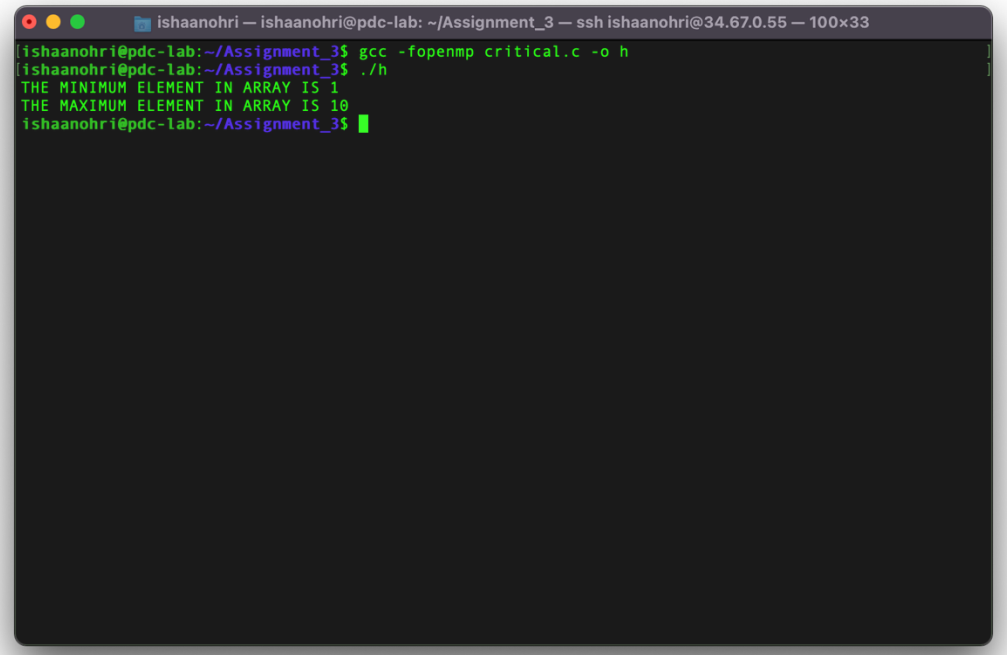


example of critical clause

Source Code:



Execution:



Result:
From this experiment I understood the usage of *reduction clause* using parallel pragma and arrays by sum of array elements, and product of array elements. Along with the use of *reduction clause*, I even understood the usage of *critical clause* by finding the minimum and the maximum element in the array. The above experiment was conducted and all results along with the source code have been attached above in the document. The experiment was assisted by Dr Deepak. I thank sir for his assistance.