Concurrent and Parallel Programming Lab Section – A Assignment - 1

07-Aug-2019

1. Write a C program to implement the unbounded array. The unbounded array can hold an arbitrary number of elements. It should support addition, modification and deletion operations. As and when the number of elements changes array size also should change respectively.

Tip: Start with an initial size of your choice. When the array is full by 75% of its original capacity, increase its capacity to double. Similarly, when the array is only occupied about 25% of its capacity, reduce its size to half. Assume the elements are integers.

2. Extend the above program to simulate the addition and deletion of multiple items at random locations. The array must be dynamic to adjust its size and keep its elements in contiguous locations.

Note: Write the appropriate Input and Output statements.