1.Explain why deletion is typically faster in a linked list compared to an array in Java.

Ans. In Data Structure, we generally use Big ‘O’ notation as (O(n)). If we add or remove elements, it will affect our time. So, O(n) represents time complexity. In Array List, every element has its own index number. If we remove an element from the array list, the index number of other elements in the list is changed ,and the elements in the array list gets updated which is time consuming, cause of shifting elements. In the linked list, it follows concept of double linked list in which every element we add, it will make a node of it, one will be previous node, and another will be next node. Even if we remove any element from the list, it will just refer to the node which is previous and next to that element, and it won’t be affecting the no. of nodes before and after that. Because of this reason, Linked List is supposed to be faster in terms of deletion.