

NAME – RAJDEEP JAISWAL

DATE -

BRANCH – BTECH CSE

SEC = 13 A

UID -20BCS2761

SUB- DATA STRUCTURE ASSIGNMENT

Q - Make a comparison between a linked list and a linear array. Which one will you prefer to use and when?

ANS

A linked list is a linear data structure, in which the elements are not stored at contiguous memory locations. The elements in a linked list are linked using pointers. Linked lists also use more storage space in a computer's memory as each node in the list contains both a data item and a reference to the next node. It follows that linked lists should be used for large lists of data where the total number of items in the list is changing.

where as

A linear array, is a list of finite numbers of elements stored in the memory. Elements of the array form a sequence or linear list, that can have the same type of data. Each element of the array, is referred by an index set. And, the total number of elements in the array list, is the length of an array.

Both will use on their need and when the situation is in the favour of one.