

* Applications of data Structure:-

The various applications of data structure are:-

- It describes the Physical and Logical relationship between the data item.
- It provides the method of representing the data elements in the memory of computer efficiently.
- We can solve various numerical problem with the help of data structure.

* Real Time application of Data Structure :- In this, the real time applications of all the data structure are discussed:-

1. Application of Arrays:-

→ Array can be storing data in tabular format

→ A Simple Question paper is an array of numbered questions with each player in the game.

2. Application of Linked List:- (A Linked List is a sequence data structure, which connects elements, called nodes through links)

→ Images are linked with each other. So, an image viewer software uses a linked list to view the previous and the next images using the previous and next buttons.

→ Web Pages can be accessed using the previous and next URL links which are linking using linked list.

3. Application of Stack:- It uses LIFO order.

→ call logs, E-mails, you Tube downloads, Notifications (latest appears first).

→ History of visited websites.

4. Applications of Queue:-

→ OS, uses Queue for Job scheduling.

→ Sending an email, It will be Queued.

5. Application of Graph:- (Graphs is a DS, which data is stored in a collection of interconnected vertices and edges).

→ facebook, instagram and all social media networking sites every user is node.

→ Data organization.

6. Application of Tree:- (Trees are hierarchical structures having a single root node).

→ Posting questions on websites like Quora, the comments are child of questions.