## Definition

•A data structure is a collection of data values, the relationships among them, and the functions or operations that can be applied to the data

•Data structures can implement one or more particular abstract data types (ADT), which specify the operations that can be performed on a data structure and the computational complexity of those operations. In comparison, a data structure is a concrete implementation of the space provided by an ADT.

•In short, a data structure is a mathematical object with some set of properties that can be realized in many different ways as data types. A data type is just a class of values that can be concretely constructed and represented.

•Data Structure: They are used to store data in organised form in computer.

•Data Types: They basically specify the type of data you are storing in your system

•C is a computer language, let me compare it to English for your ease. We have letters(a,b,c etc) in english, we have numbers (1,2 etc) and special characters (\_, "etc). we use these characters to form words(Cat, Fan Dog etc)

•In a similar mannner we have data types in C as: int( which can hold value of interger type data), we have char( which can hold any single character) and we use these data types to form Data Structures as Stacks, queues, link list array etc.

- •White Paper (DRAFT)
- •A Data Structure for Integrity Protection with Erasure Capability(NIST)