**Data Structure**

* Data Structure :
* It is a process of organize, structure data inside the memory so that efficient utilization memory.
* It is not a programming language like C, C++ etc.
* The process of organizing and arranging the data inside the maim memory so that it can be efficiently utilized by the application is called as **Data Structure.**
* Two types of Data Structure :
* Linear Data Structure
* Non-Linear Data Structure
* Pointer : It is a variable that contains the address of another variable.
* One of the main to use pointer to **access the heap memory**.
* Another reason to **access other resources** such as files , internet , keyboard etc. which doesn’t belong to program.
* **Parameter passing.**
* Every pointer takes same amount of memory which is **8 bytes**.
* Type of pointer is **independent**.
* To access Heap Memory :
* C :
* **P =(int \*) malloc(5 \* sizeof(int));**
* **Free(p)** : to free allocated heap memory
* CPP :
* **P = new int[3];** Memory will allocate to the Heap Memory by using **Malloc** and **New** keyword.
* **Delete [] p;** to feel allocated heap memory
* Monolithic Programming :
* Everything inside a main() is called **monolithic Programming**.
* Modular/Procedural Programming :
* The code is divided into multiple Functions. So this type programming is known as **Modular/Procedural Programming**.