Day-09

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:- Lacture - 09 :-

:- Arrays :-

= Array :- It is a type of data sturcure with cont -ain a similar data types.

→ value / memory allocate in array in contigous location.

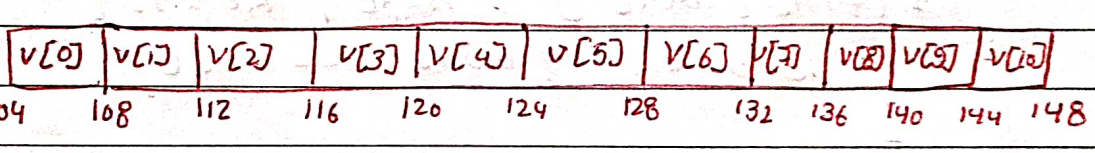
→ we can access the element in array with the help of "index"

= Why array ?

We can Store value in a single variable

Implementation :-

```
int arr[10];
```



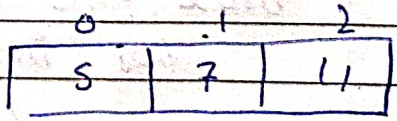
v

int type = 4byte

v[3] = 104 + 3x4

= 104 + 12

= 116.



number

Initialization :-

```
int arr[3] = { 5, 7, 11 }
```

Ex:- int arr[10000] = {0}; → apply only in 0.

0	0	0	0	..	0

= Linear Search:-

2	9	6	7	4	12	15
0	1	2	3	4	5	6

-6 is present or absent in array.

```
#include<iostream>
using namespace std;
int main(){
    int arr[5] = {1,3,5,7,8};
    int size = 5;

    cout << "Enter the key to find: " << endl;
    int key;
    cin >> key;

    if (find(arr[], size, key)){
        cout<<" found " << endl;
    }

    else {
        cout <<" not found " << endl;

bool find (int arr[], int size, int key){
    for (int i=0, i<size, i++){
        if (arr[i] == key){
            return true;
        }
    return false;
}
```