ARRAYS

Array is collection of homogeneous [same type] elements.

Array is nothing but collection [group] of contiguous [continuation] memory [bytes] where we can store more than one value of same type in a single variable.

It is a derived data type.

It is a non-primitive data type / group dt.

It is an implicit [internal] pointer.

It is one of the data structure.

Advantages:

Instead of several variables, one var is enough.

Easy to remember the var name.

Program size reduced.

Search time reduced.

Performance is high

Easy to carry multiple values from one function to another function.

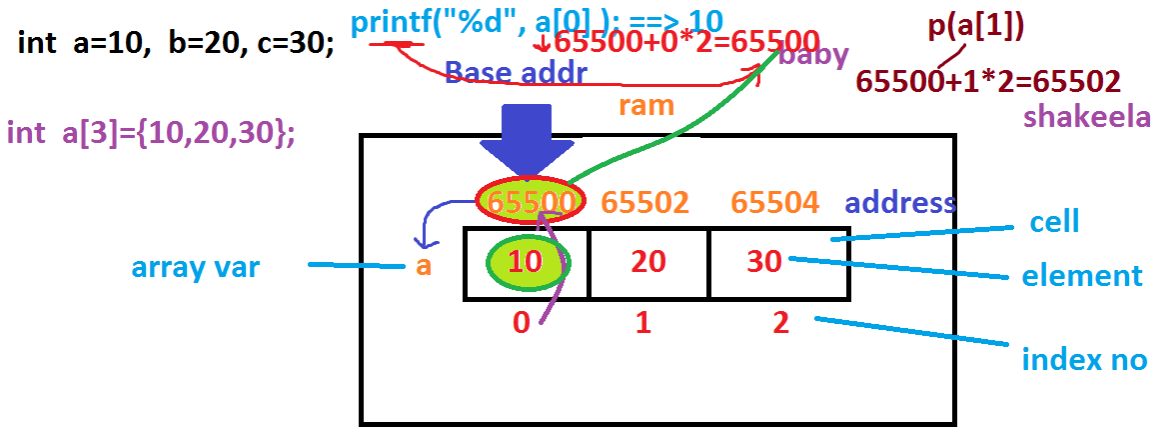
Disadvantage:

Size – const +ve integer

2 ways

1. **Static / compile time memory allocation**
2. **Dynamic/runtime**

Dynamic memory allocation



Int sub[6];

Char name[50] = “PK”;

Int * p; ← int pointer variable [address]

int tel, eng, hin, mat, sci, soc;

scanf(“%d%d%d%d%d%d”,&sub[i]);

int sub[6];

Int a[3]; ← int array variable

Int a=10,20,30;