



** Lower and upper bound in 1-D- Array

Let suppose we have one-dimensional array

```
int A[6] = { 15, 7, 11, 44, 93, 20 };
```

↓
Subscript

Width (W)

Here is 2 bytes.

Assumed Base Address (B)
Here is 1100
↓

↓

Actual Address in the Memory	1100	1102	1104	1106	1108	1110
Elements of array	15	7	11	44	93	20
Address with respect to the Array (Subscript)	0	1	2	3	4	5

→ Upper bound [UB]

↑
Lower limit / Bound of Subscript (LB)

Array of an element of an array A[6]

Where

⇒ B = Base Address

→ W = Storage size of one element stored in the array (in byte)

→ I = Subscript of element whose address is to be found.

→ LB = Lower limit / Lower bound of Subscript, if not specified assume 0 (Zero).

So Address of A[7] = $B + W * (I - LB)$