OOP Assignment # 1:

Part 1: Conceptual Implementation

Question no 3 :

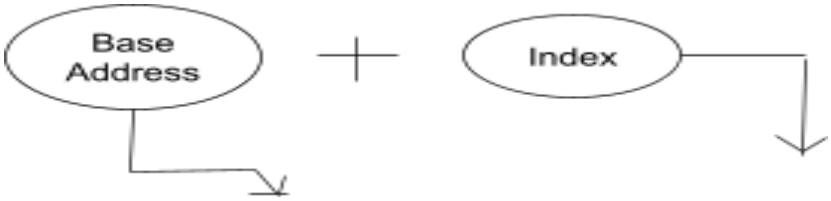
Demonstrate how array elements can be accessed using base + index arithmetic.

Answer:

Array in a collection of data of the same type . This is a list of members that occupies contiguous memory . While creating an array , we got a base address . When we pass an array to any function , base address is received as a parameter and the data type of the array gives the information about the memory occupied by each index element which is equal to the size of data type (which further depends on the memory of the compiler we are working on) .

By knowing the base address we could find the allocated memory of the array on stack and then either by adding the ith number or the index we want to know tells the compiler , how many blocks you have to go further for out requirement element accessing .

By adding the index we the compiler skips the memory blocks and then access the required one . The pointer or array addition depends upon the data type of array .



Base address Required Index

7	10	15	800	70	18	20

A[0]
* (A+0)

A[4]
*(A+4)

Question 4: