

## LAB 2- ARRAY (Abstract Data Type - ADT)

Suppose you have to develop a program which should exhibit the array as an ADT. You are developing a record keeping system for a superstore which is previously operating in manual fashion. All the manual account books are stored in archive. The store manager is requiring to access the archived manual by providing following information.

**1- Book # 2- Page # 3- Row # 4- Column #**

In order to provide a complete CRUD functionality your system should ensure following functions.

- CREATE [create array and insert elements to fill all the indices of books]
- READ [Traverse all the element in the book by]
  - Read a single element of Book for example, 3<sup>rd</sup> book – 4<sup>th</sup> page – 3<sup>rd</sup> row – 5<sup>th</sup> column
- UPDATE
  - Read a single element of Book for example, 3<sup>rd</sup> book – 4<sup>th</sup> page – 3<sup>rd</sup> row – 5<sup>th</sup> column and update with user's provided value
- DELETE
  - Read a single element of Book for example, 3<sup>rd</sup> book – 4<sup>th</sup> page – 3<sup>rd</sup> row – 5<sup>th</sup> column and delete (replace the element to be deleted with 0)
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*NOTE: - All your data manipulation will be through dereference operator. Only declare variable wherever necessary*