|  |
| --- |
| **Lab 1:Array** |

Objective(s): Upon completion of this lab session, students will be able to:

|  |
| --- |
| * Insert an element in an array * Delete an element from array * Traverse an array |

Exercise 1

Write a program to implement the following array

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 13 | 45 | 67 | 34 | 11 | 23 | 17 | 20 |  |

1. Insert 50 at position 3
2. Traverse the array.
3. Delete an element located at position 5

Exercise 2

Write a program that stores the Name of students in an array given as follow.

1. Now Input the name and position where new student will be store in an array.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sara | Hamza | Musa | Haris | Amna | Mariam | Saad | Sameer | Talha |  |

1. Delete the name from position input by user

Exercise 3

Write a program that implements the array BOOK which records the number of books sold each year from 2000 through 2020

1. Find the number NUM of years during which more than 300 books were sold.
2. Print each year and the number of books sold in that year.

Exercise 4

Write a program that takes the marks out of 50 as input and find the following

1. Number of students that score above average.
2. Find the lowest marks.
3. Find the highest marks.

Exercise 5

Write a program that stores the birth year of 20 students in an array.

1. Print the position of the youngest student.
2. Print the number of students who are 20 years old.

Exercise 6

Write a program that reads n number of values in an array and display it in reverse order.