C Programming: Lab Assignments



ASSIGNMENT 5: 1-D Arrays

NOTE: Write menu driven programs wherever possible so that you can write functions in one program to combine multiple assignments.

- 1. Write a program to accept marks of five subjects, calculate its total and average.
- 2. Write a function to accept array elements from the user. Write another function to print array elements. Re-use these functions in rest of the assignments wherever required.
- 3. Write a function to reverse the array elements.
- 4. Write a function to calculate maximum of the array elements. Write another function to calculate maximum of the array elements.
- 5. Write a function to calculate maximum and minimum of the array elements.
- 6. Write a function to remove duplicate elements from the array. After processing the array should store only the unique elements consecutively. Also function should return the number of unique elements into the array.
- 7. Write a function to sort the array using selection or bubble sort.
- 8. Write a function to search the given number into the array using linear search and return the index of the element. If element is not found it should return -1.
- 9. Write a function to search the given number into the array using binary search and return the index of the element. If element is not found it should return -1.
- 10. Write a function to search the given number into the array using linear search and return the address of the element. If element is not found it should return NULL.