Array Assignment

1. Take 10 integer inputs from user and store them in an array and print them on screen.
2. Take 10 integer inputs from user and store them in an array. Again, ask user to give a number. Now, tell user whether that number is present in array or not.
3. Take 20 integer inputs from user and print the following:
   number of positive numbers
   number of negative numbers
   number of odd numbers
   number of even numbers
   number of 0s.
4. Take 10 integer inputs from user and store them in an array. Now, copy all the elements in another array but in reverse order.
5. Find largest and smallest elements of an array.
6. Write a program to check if elements of an array are same or not read it from front or back.
7. Write a program to shift every element of an array to circularly right. E.g.-
   INPUT: 1 2 3 4 5
   OUTPUT: 5 1 2 3 4
8. Sorting refers to arranging data in a particular format. Sort an array of integers in ascending order. One of the algorithms is selection sort. Use below explanation of selection sort to do this.
   INITIAL ARRAY:
   2 3 1 45 15
   First iteration: Compare every element after first element with first element and if it is larger than swap. In first iteration, 2 is larger than 1. So, swap it.
   1 3 2 45 15
   Second iteration: Compare every element after second element with second element and if it is larger than swap. In second iteration, 3 is larger than 2. So, swap it.
   1 2 3 45 15
   Third iteration: Nothing will swap as 3 is smaller than every element after it.
   1 2 3 45 15
   Fourth iteration: Compare every element after fourth element with fourth element and if it is larger than swap. In fourth iteration, 45 is larger than 15. So, swap it.
   1 2 3 15 45

9. Input any number. Find the sum of the digits of the number using a recursive function.