**Program-12**

**Algorithm:**

Step 1:-Start.

Step 2:-Initialize an array of n elements.

Step 3:-Initialize i = 0 if I >n Goto 5.

Step 3:-Initialize j =i+1 if j >n Goto 5.

Step 4:- Compare a[i] and a[j]

1. IF a[i] >a[j] swap a[i] and a[j] , i++,j++ .
2. ELSE i++,j++.

Step 5:-Stop.

#include <stdio.h>

int main()

{ int array[100], n, c, d, swap;

system("Color F0");

printf("Enter number of elements\n");

scanf("%d", &n);

printf("Enter %d integers\n", n);

for (c = 0; c < n; c++)

scanf("%d", &array[c]);

for (c = 0 ; c < ( n - 1 ); c++)

{ for (d = 0 ; d < n - c - 1; d++)

{ if (array[d] > array[d+1]) /\* For decreasing order use < \*/

{

swap = array[d];

array[d] = array[d+1];

array[d+1] = swap; } } }

printf("Sorted list in ascending order:\n");

for ( c = 0 ; c < n ; c++ )

printf("%d\n", array[c]);

return 0;

}

