Practical No.05

Aim: Programs based on One-Dimensional Array

1. C Program to Find Largest element in Array.

Program:

```
#include<stdio.h>
#include<conio.h>

void main()

{
   int a[30], i, num, largest;
   clrscr();

   printf("\nEnter no of elements :");
   scanf("%d", &num);


//Read n elements in an array

   for (i = 0; i < num; i++)
      scanf("%d", &a[i]);

//Consider first element as largest

   largest = a[0];

   for (i = 0; i < num; i++) {
      if (a[i] > largest) {
         largest = a[i];
      }
   }

// Print out the Result

   printf("\nLargest Element : %d", largest);


getch();

}
```

Output:

```
Enter no of elements : 5
11 55 33 77 22
Largest Element : 77
```

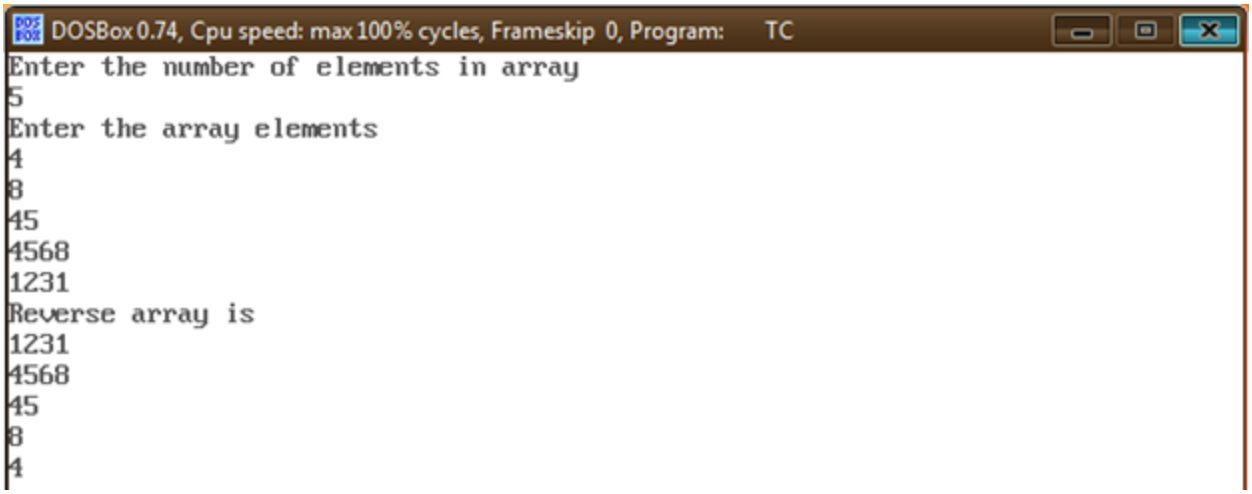
2. C program to Reverse an Array

Program:

```
#include<stdio.h>
#include<conio.h>
void main()
{
   int n, c, d, a[100], b[100];

   clrscr();

   printf("Enter the number of elements in array\n");
   scanf("%d", &n);

   printf("Enter the array elements\n");

   for (c = 0; c < n ; c++)
      scanf("%d", &a[c]);


//Copying elements into array b starting from end of array a


   for (c = n - 1, d = 0; c >= 0; c--, d++)
      b[d] = a[c];


//Copying reversed array into original.


   for (c = 0; c < n; c++)
      a[c] = b[c];

   printf("Reverse array is\n");

   for (c = 0; c < n; c++)
      printf("%d\n", a[c]);

   getch();
}
```

Output:

```
Enter the number of elements in array
5
Enter the array elements
4
8
45
4568
1231
Reverse array is
1231
4568
45
8
4
```


DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC
Enter the number of elements in array
5
Enter the array elements
4
8
45
4568
1231
Reverse array is
1231
4568
45
8
4