

## EXERCISE 11

**Write a C program to implement Stack operations such as PUSH,POP and PEEK**

### AIM

To write a C program to find the largest number in a given array.

### ALGORITHM

1. Start
2. Initialize the array with given elements
3. Assume the first element is the largest and store it in a variable max
4. Traverse through the rest of the array
5. Compare each element with max
6. If an element is greater than max, update max with that element
7. After the traversal, max will hold the largest number
8. Display max
9. End

### PROGRAM (in C)

```
#include <stdio.h>

int main() {
    int arr[] = {5, 9, 2, 10, 7};
    int n = sizeof(arr) / sizeof(arr[0]);
    int max = arr[0];
    for (int i = 1; i < n; i++) {
        if (arr[i] > max) {
            max = arr[i];
        }
    }
}
```

```
    printf("The largest number in the array is %d\n", max);  
    h return 0;  
}
```

#### **Input&output :**

```
The largest number in the array is 10
```

```
=== Code Execution Successful ===
```

#### **RESULT:**

The program executed successfully by implementing stack operation push,pop and peek