

Lab 6

Q1. Write a program to implement a stack using an array. For this define a stack as a struct:

```
typedef struct{  
    char arr[100];  
    int top;  
} stack;
```

In the main method perform the following operations:

Push: A

Print the top of the stack

Push: B

Print the top of the stack

Pop

Pop

Pop

Q2. Write a program to check if a given string has balanced bracket expression using a stack. Test your program for:

- a. (())
- b. {}([])

Optional: Remove the main method from Q1 and include it as **#include "filename.c" in this file.** You will be able to directly use the push, pop, top functions in this new file. You don't have to code it again.

Optional Program for today:

Q3. Write a program to convert any infix expression to a post fix notation using a stack.