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# Crux

Data Structures -2

Stacks and Queues

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# Recursion and Pile of Books



# Stacks

# Stacks

```
class Stack{  
    // accessor methods  
    int size();  
    boolean isEmpty();  
    Object top() throws StackEmptyException;  
    // update methods  
    void push (Object element);  
    Object pop() throws StackEmptyException;  
}
```

# How to implement Stack Class?

1. Arrays
2. Linked List

# Lets Implement Our Own Stack Class Using Array

# Your Turn: Implement Stack Class Using Linked List

# Lets solve few problems

1. Given an expression check if brackets are balanced e.g.  $\{ a + [ b + ( c + d ) ] + ( e + f ) \}$
2. Reverse a Stack with the help of another empty stack





Thank You !! 😊

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