



Lecture-17

Data Structures

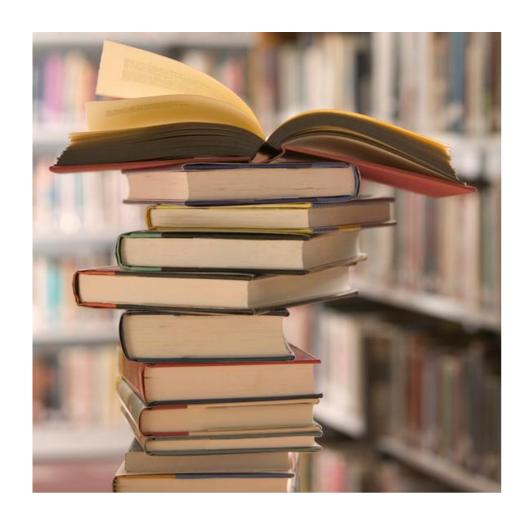
- Stacks
- Queues

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Vector



Recursion and Pile of Books





Stacks



Stacks

```
Struct Stack{
// accessor methods
int size();
bool is Empty();
int top();
// update methods
void push (int element);
void pop();
```



How to implement Stack Class?

- 1. Arrays
- 2. Linked List



Lets Implement Our Own Stack Class Using a Vector



Templates



Your Turn: Implement Stack Class Using Linked List



Lets solve few problems

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







Thank You!

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