

Lecture 4

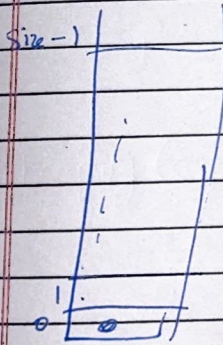
Stack

Last In, First Out

```
struct stack {  
    int sp;  
    int arr[size];  
}
```

$$\text{Total Memory} = (\text{no. of elements} + 1) * \text{size of one int}$$

↓
because of sp



pop → removes top element
top → returns top element
push → add new element to top

Address vs Value

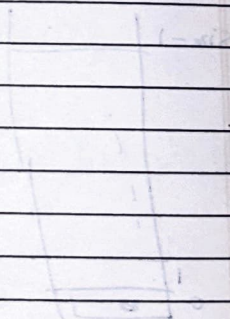
Advantage: Pass the address in isEmpty and isFull to not waste memory.

Disadvantage: ~~No~~ Chance of data being disturbed.

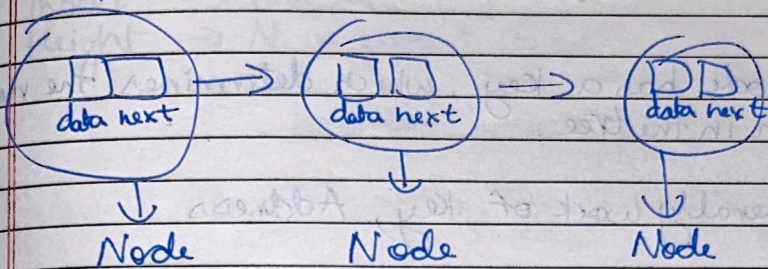
$$T_{\text{total}} = T_{\text{wait}} + T_{\text{service}} = \frac{1}{\mu} + \frac{1}{\mu} = \frac{2}{\mu}$$

First In, First Out

- thrombolytic got myocardial \rightarrow greatly
 - thrombolytic got myocardial \rightarrow great
 got to thrombolytic \rightarrow great



Head
↑
Linked List



struct node will have some data and another struct *next ~~also~~ pointing to the next Node.

Using linked list as a Stack

