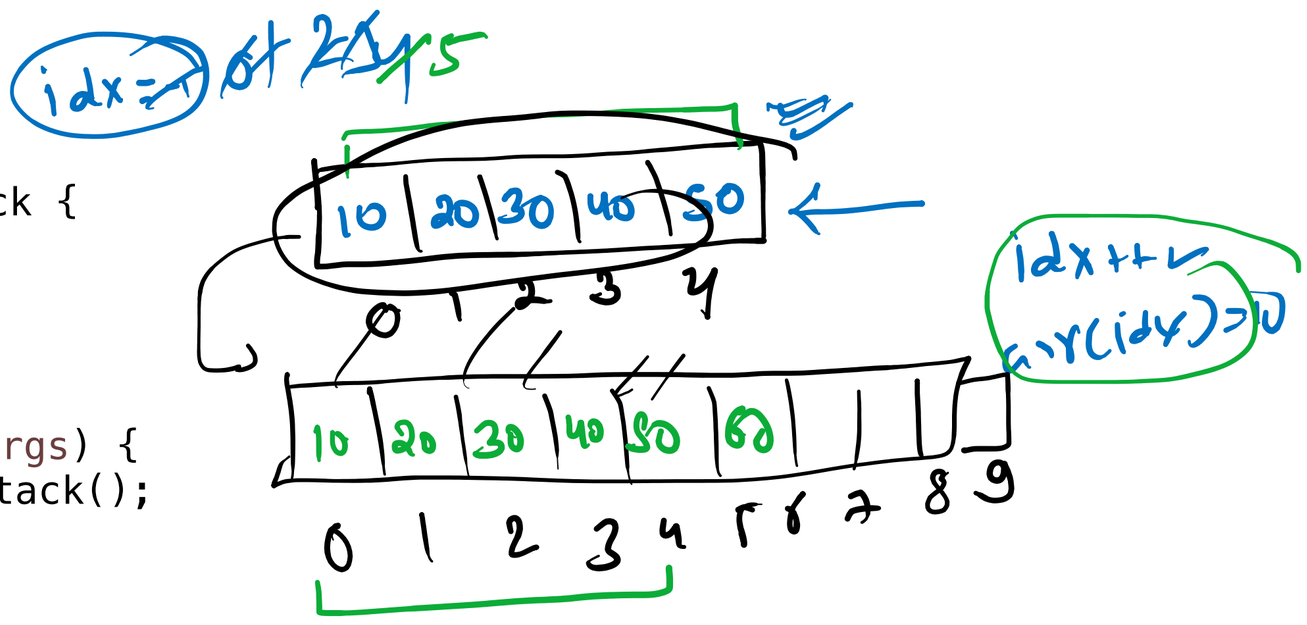
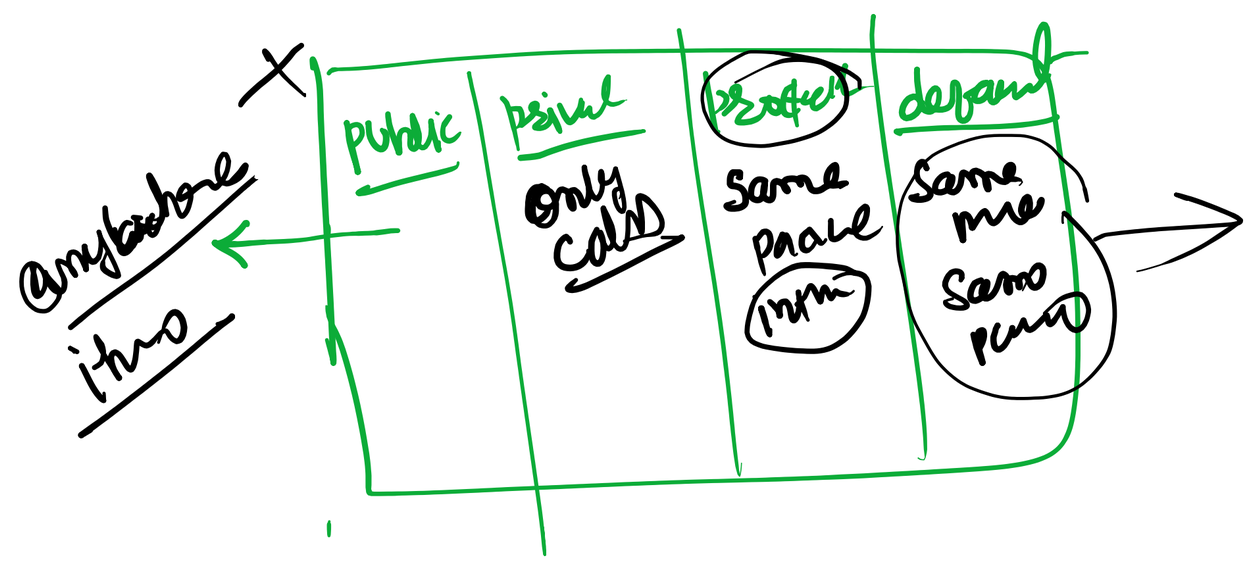
Lec-30

05/11/24 6:30 PM

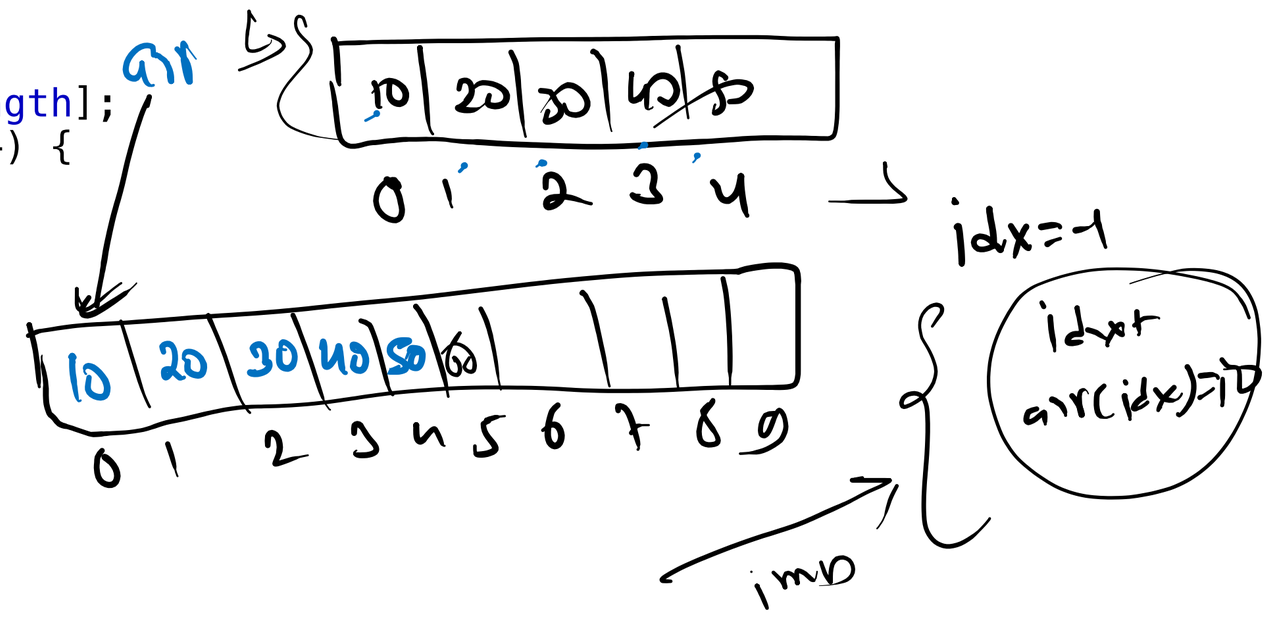
```
public class DynamicStack extends Stack {
    @Override
    public void push(int item) {

    }

    public static void main(String[] args) {
        DynamicStack ds = new DynamicStack();
    }
}
```



DS.push(10)
DS.push(21)
DS.push(32)
DS.push(40)
DS.push(50)
DS.push(60)

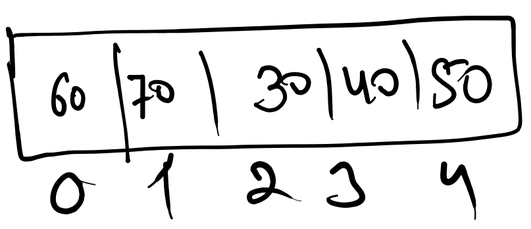



```
public class DynamicStack extends Stack {

    @Override
    public void push(int item) {
        if (isFull()) {
            int[] new_arr = new int[2 * arr.length];
            for (int i = 0; i < arr.length; i++) {
                new_arr[i] = arr[i];
            }
            arr = new_arr;
        }

    public static void main(String[] args) {
        DynamicStack ds = new DynamicStack();
    }
}
```



DS.push(10)
DS.push(21)
DS.push(32)
DS.push(40)
DS.push(50)
DS.push(60)

newArr(i) = arr((f+i)%sz)



60 70 30 40 50 80

f+i
2+0=2
2+1=3
2+2=4
2+3=5%5=0
2+4=6%5=1