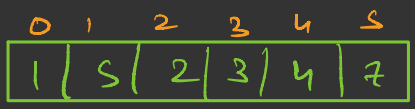
Recursion 3

Ques Print in reverse



⇒ 7 4 3 2 5 1

printReverse (int arr[], int idx)

Expectation

PR(arr, 0)

7
4
3
2
5
1

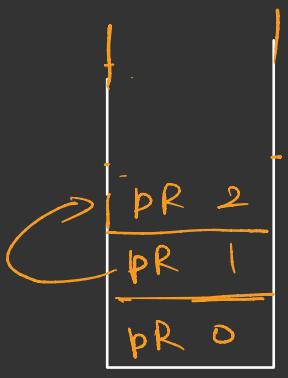
Faith

PR(arr, 1)

7
4
3
2
5

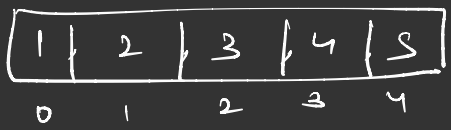
Combine

PR(arr, 1)
Syso(arr[0]);




```
void PR (int arr[], int idx)
if(arr.length == idx)
    return;
PR(arr, idx+1);
Syso(arr[idx]);
```

7 4 3



pR2 (arr, arr.l - 1)

Expectation

pR2(arr, 4)

5
4
3
2
1

Faith

pR2(arr, 3)

4
3
2
1

Combination

syso(arr[4]);
pR2(arr, 3);

syso(arr[idx]);
pR2(arr, idx - 1);

pR2 -1	
pR2	0
pR2	1
pR2	2
pR2	3
pR2	4

```
if(idx == 0){
    syso(arr[0]);
    return
}
```

5
4
3
2
1

Q Max of the array

12	7	11	3	5	9
0	1	2	3	4	5

⇒ 11

Expectation

max(arr, 0)

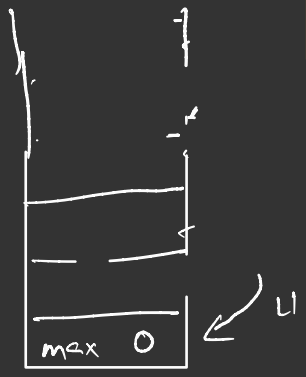
⇒ 12

Faith

max(arr, 1)

⇒ 11

```
int maxOfNextIdx
  = max(arr, idx+1);
return Math.max
  (arr[idx], maxOfNextIdx);
```




```
if (idx == a.l - 1)
  return arr[i];
```

Q Find last idx

0	1	2	3	4	5	6	7	8
4	1	6	2	6	2	4	1	7

10

val = 1 ⇒ 7

⇒ 10 ⇒ -1

Expectations

fi(arr, val 4, 0) ← idx

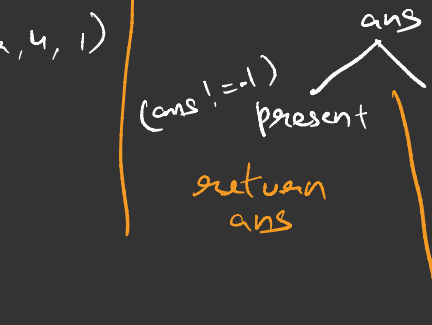
⇒ 6

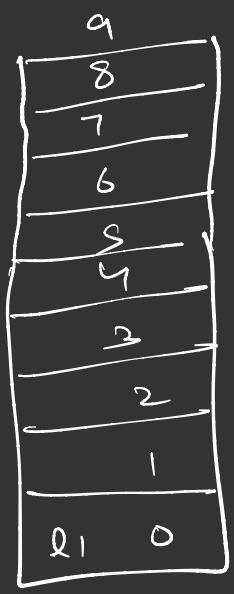
Faith

fi(arr, 4, 1)

⇒ 6

Combine





return -1