Dynamic Set

* Mathematical sets are unchanging
* Sets used in computers can grow or shrink i.e. they are DYNMIC

Elements {

Key,

SatelliteData

}

Key data

The key is needed for the operation of the tree. Everything else isn't

Satellite data

Refers to any "payload" data which you want to store in your data structure and which is not part of the structure of the data structure. It can be anything you want. It can be a single value, a large collection of values, or a pointer to some other location that holds the value

Example

Node {

Node next; // key

int value; // satellite data

}

Queries operations

* Search(S, K)
* Minimum(S)
* Maximum(S)
* Successor(S, x)
* Predecessor(S, x)

In which, S is a Dynamic Set, K is the key and x is satellite data

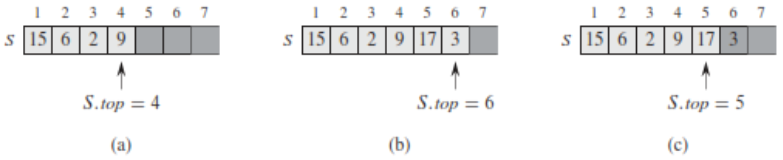
Modifying operations

Insert(S, x)

Delete(S, x)

Stack

LIFO - Last In First Out

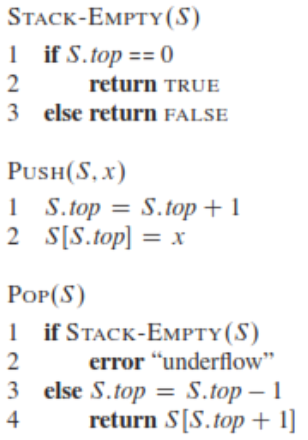


a) S has 4 elements and the top element is 9

b) After called PUSH(S, 17) and PUSH(S, 3)

c) After called POP(S)

Pseudo code



See more in finalreview.lec8.MySimpleStack.java