

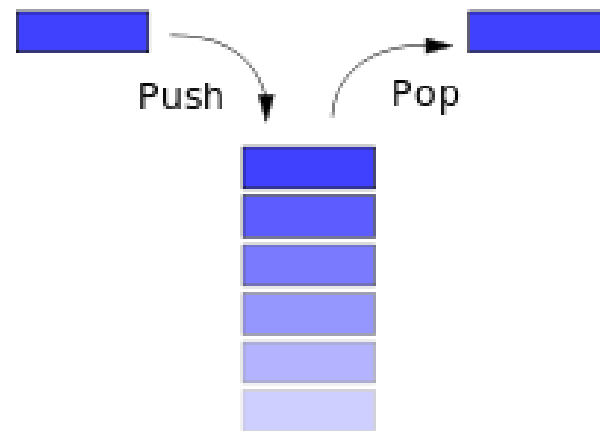
Strukture te Dhenash

Seminar 12

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Stiva

- Nje liste lineare nje-drejtimore , ne te cilen operacionet e heqjes dhe te shtimit te nje elementi behen vetem tek koka e listes.
- Koka ne kete rast quhet kulm i kokes.
- LIFO(Last In First Out)



Deklarimi i Stives

```
typedef struct element {  
    int vlere;  
    struct element *pas;  
} stive;
```

- Tipi i te dhenes qe mban element (vlere) eshte INT kurse elementi adresa e elementit pasardhes eshte PAS i tipit liste.

Ushtrimi 1

- Krijoni nje stive dhe pastaj krijoni nje stive boshe

```
Stive * stiveboshe(){  
    Return NULL;  
}
```

Ushtrimi 2

- Ndertoni nje funksion qe kontrollon nese nje stive eshte boshe.
Kthen 1 nqs eshte boshe dhe 0 nqs jo

Ushtrimi 3

- Ndertoni nje funksion qe shton nje element te ri ne stive.

Ushtrimi 4

- Ndertoni nje funksion qe hec nje element nga stiva

Ushtrimi 5

- The insertion and deletion are done at _____ of the stack.
- _____ and _____ are the operations of stack.
- _____ is an application of stack.
- When $rear = size$ of stack then stack is _____.
- The postfix evaluation is done based on _____.

- The stack is a _____ data structure.
 - FIFO
 - LIFO
 - Both a and b
 - FILO

- The pointer Top increases when an _____
 - Element is inserted
 - Element is deleted
 - Element is displayed
 - None

- Which of the following is not stack application?
 - Recursion
 - Templates
 - String reversion
 - Process scheduling

- Stacks are dynamically represented using

_____.

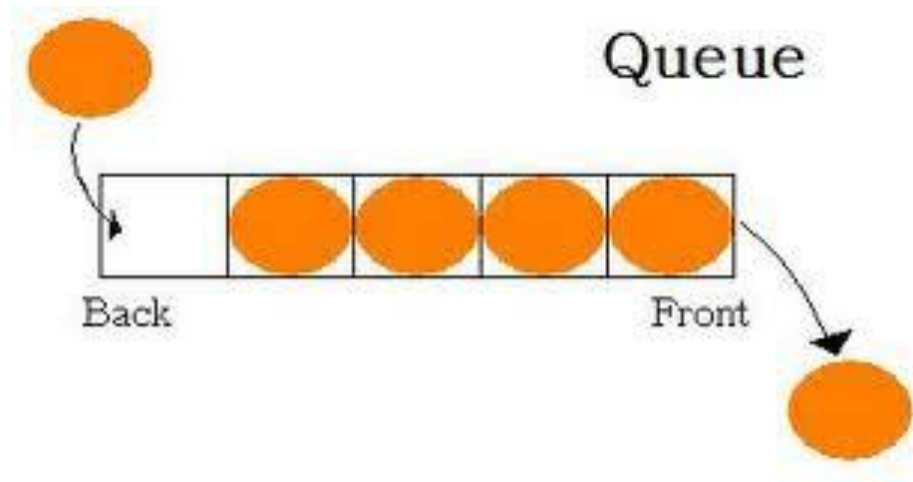
- Pointers
- Structures
- Linked lists
- None

- When is a stack said to be empty?
 - $top == n$
 - $top == 0$
 - $front == 0$
 - $front = rear = 0$

<http://my.safaribooksonline.com/book/programming/cplusplus/9788131755679/chapter-6dot-stacks/navpoint-157#X2ludGVybmFsX0h0bWxWaWV3P3htbGlkPTk3ODgxMzE3NTU2NzkIMkZuYXZwb2ludC0xNDMmcXVlcnk9>

Rradha

- Rradha eshte nje liste e vecante ne te cilen shtimi i elementit behet nga bishti, kurse heqja nga koka.
- FIFO (First In First Out)



Rradha

- Ka dy shenjuesa: kreu dhe fundi
- Elementi i fundit i rradhes do trajtohet vetem kur ai te behet element i pare (kreu)

Deklarimi i rradhes

```
typedef struct element {  
    int vlere;  
    struct element *pas;  
} rradhe;
```

```
typedef struct {  
    rradhe *kreu, *fundi;  
} rradhesh;
```

Ushtrim 6

- Krijoni nje rradhe boshe

Ushtrimi 7

- Ndertoni nje funksion qe kontrollon nese rradha eshte boshe apo jo

Ushtrimi 8

- Ndertoni nje funksion qe fut nje element ne rradhe

Ushtrimi 9

- Ndertoni nje funksion qe heq nje element nga rradha

- Queues are also known as _____ structures.
- _____ are dynamic queues.
- _____ are the types of queues.
- Queue is said to be full when _____.
- _____ is the drawback of linear queues.
- _____ are known as deques.
- The advantage of circular queue _____.

- The data structure that allows deleting data elements from front and inserting at rear is _____.
 - Stacks
 - Queues
 - Deques
 - Binary search tree

- Identify the data structure that allows deletions at both ends of the list but insertion at only one end.
 - Input-restricted deque
 - Output-restricted deque
 - Priority queues
 - None of the above

- A difference between a queue and a stack is
 - Queues require dynamic memory, but stacks do not.
 - Stacks require dynamic memory, but queues do not.
 - Queues use two ends of the structure, stacks use only one.
 - Stacks use two ends of the structure, queues use only one.

- <http://my.safaribooksonline.com/9788131755679/navpoint-158#X2ludGVybmFsX0h0bWxWaWV3P3htbGlkPTk3ODgxMzE3NTU2NzkIMkZuYXZwb2ludC0xNzQmcXVlcnk9>

