

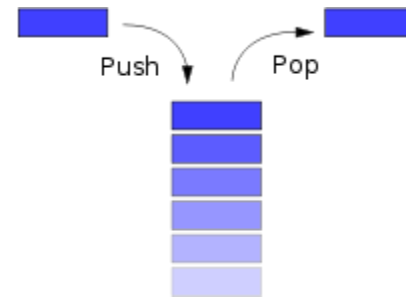
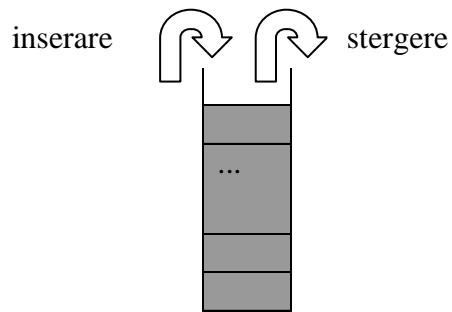
Stive



- **Stiva** este o lista liniara in care inserarile si stergerile din lista se pot face numai pe la un capat al listei, numit varful stivei.



Reprezentare (LIFO)



Notăm:

- inserarea unui element a într-o stivă S :
 $a \Rightarrow S$
- stergerea unui element a dintr-o stivă S :
 $S \Rightarrow a$.

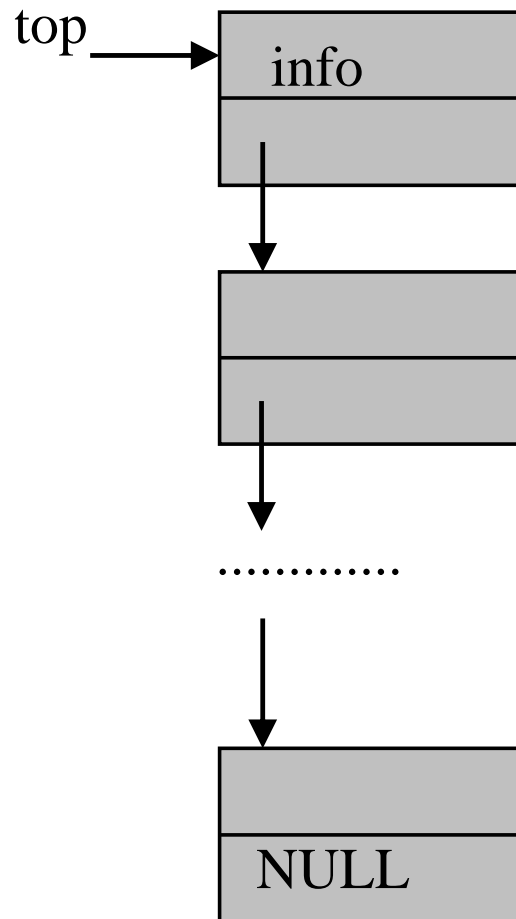
Alocare secventiala

- Vizualizare

<https://www.cs.usfca.edu/~galles/visualization/StackArray.html>

Alocare inlantuita

<https://www.cs.usfca.edu/~galles/visualization/StackLL.html>



Notam

- *top* pointer la varful stivei

*NOD *top;*

Algoritmi:

inserarea unui nod nou

Aloca memorie pentru un nod nou. Returneaza p, un pointer la noul nod.

if $p \neq \text{NULL}$ then

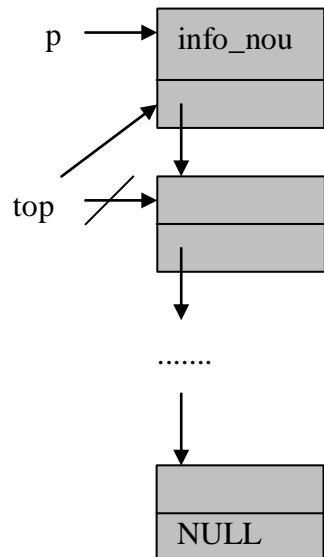
$p \rightarrow \text{link} = \text{top}$

$p \rightarrow \text{info} = \text{info_nou}$

$\text{top} = p$

else OVERFLOW

endif



stergereea/accesarea unui nod

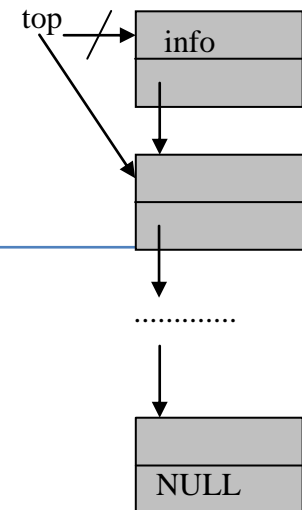
if $\text{top} = \text{NULL}$

 then UNDERFLOW

 else $\text{elem_sters} = \text{top} \rightarrow \text{info}$

$\text{top} = \text{top} \rightarrow \text{link}$

endif



Vizualizare

- <https://www.cs.usfca.edu/~galles/visualization/StackArray.html>
- <https://www.cs.usfca.edu/~galles/visualization/StackLL.html>
- <https://www.cs.usfca.edu/~galles/visualization/Algorithms.html>