

3) accesarea unui element: prin pozitie : poz .
 $x[poz]$.

2) stergerea unui elem: poz

```

if n=0 then write 'lista vida'
              write 'UNDERFLOW'
              stop
endif
if poz < 1 or poz > n then write 'poz invalida'
                          stop
endif

```

Diagram showing deletion at $poz=3$:

Initial array: $[2, 3, 4, 5, 6]$ with $poz=3$ and $poz+1=4$. Element 4 is crossed out.

Resulting array: $[2, 3, 5, 6]$

Shift elements from $poz+1$ to the end one position to the right:

$$\begin{cases} x[poz] = x[poz+1] \\ x[poz+1] = x[poz+2] \\ \vdots \\ x[n-1] = x[n] \end{cases} \quad \begin{cases} \text{for } i = poz, n-1, 1 \\ x[i] = x[i+1] \\ \text{endfor} \end{cases}$$

$n--$

Algoritmi si structuri de date ID 21.10.2023

Operatii de baza

Liste in alocare secventiala



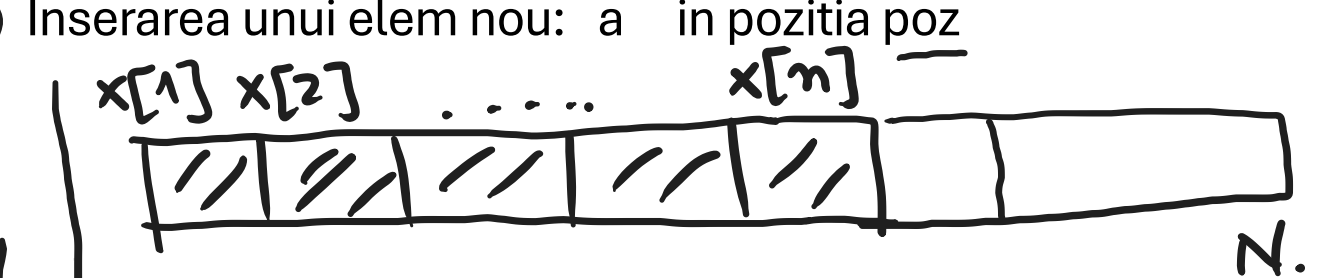
- Lista este identificata prin numere colectiei ei.
- Notam cu x numele listei.
- Notam n nr de elemente din lista.
- Notam N = numarul maxim posibil de elemente ale sirului.
- Lista vida este echivalent cu $n=0$
- Lista plina este echivalent cu $n=N$

1) Inserarea unui elem nou: a in pozitia poz

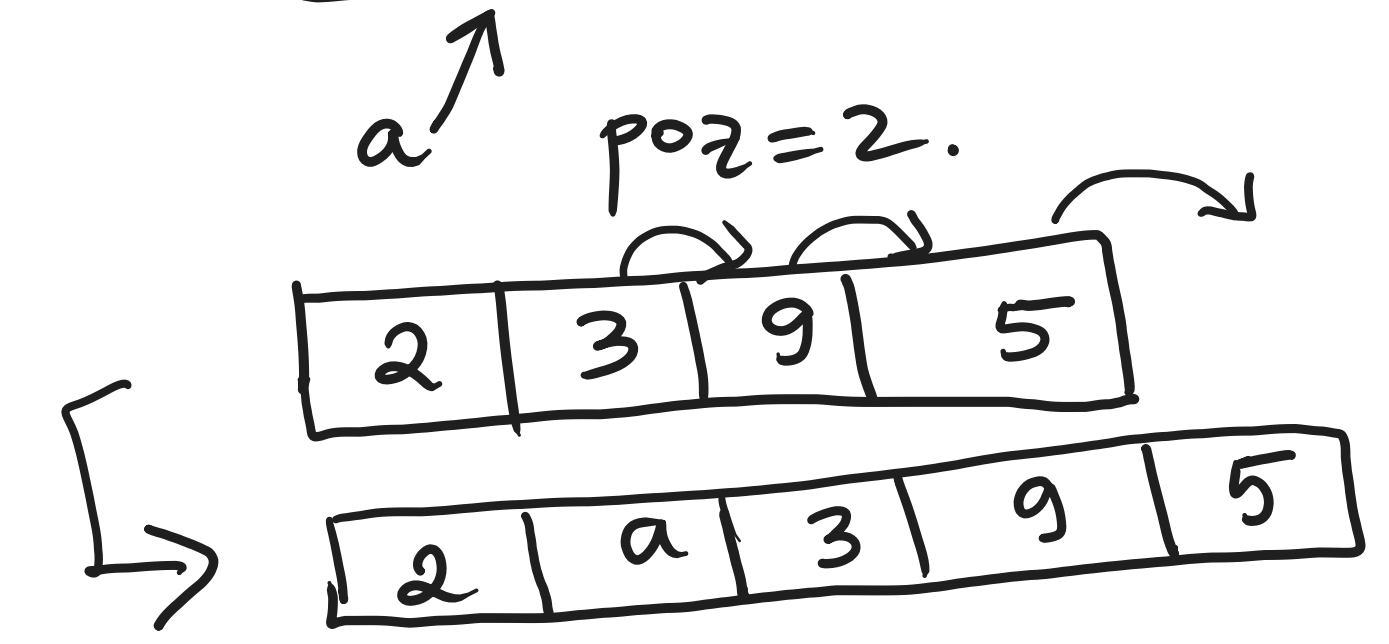
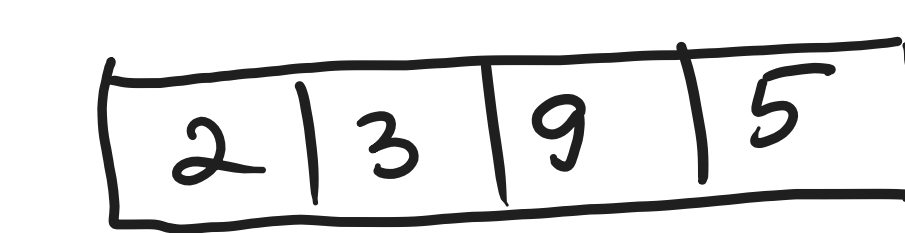
```

if n=N then
  write 'lista plina'
  write 'OVERFLOW'
  stop
endif
if poz < 1 or poz > n+1 then
  write 'poz invalida'
  stop
endif

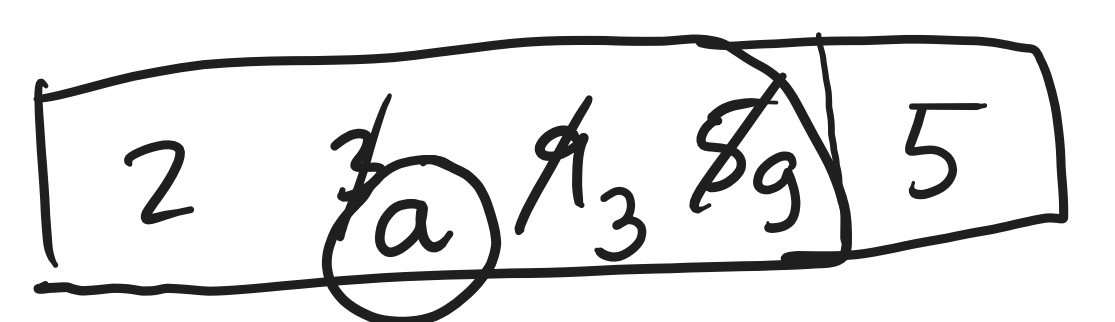
```



if $poz < 1$ or $poz > n+1$ then
 write 'poz invalida'
 stop
endif



$$\begin{cases} x[n+1] = x[n] \\ x[n] = x[n-1] \\ \vdots \\ x[poz+1] = x[poz] \end{cases}$$



$$\begin{cases} \text{for } i = n, poz, -1 \\ x[i+1] = x[i] \\ \text{endfor} \\ x[poz] = a \\ n++ \end{cases}$$

mutam spre dreapta blocul $x[poz] \dots x[n]$ o pozitie