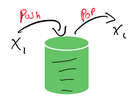
Tipos de datos

- Datos simples
  - Int
  - float
  - Char
  - bool
- Datos abstractos
  - Stack
  - Queue
  - List
  - Trees
  - Grafos

Stacks

- LIFO (Last in, firs out)



empty ()
Push (x)
Pop ()

NOTACIÓN
Infija, Prefija y Postfija

Infix: 2+5*8-7

① (2+(5*8)-7)

② (2+5)*(8-7)

Prefix: *+25-87

/*-AB+CD-EF
(A-B)*(C+D)/(E-F)

Postfix: 25+87-*

ABC+D*+E-
(A+(B+C)*D)-E

Orden
P ( )
E n^x
M * ÷
S + -

→ Tarea
balance de Paremesis
con pilas

X=(a+b)+(c+d)) ✗
Y=(a+b)+(c+d) ✓

$S=(A+B)/(D-E)+(F-g)$

① C
② (+
③ /(
④ /(-)
⑤ /+(-
/+(-)

C ✗
- ✗
) ✗
/

AB
AB+
AB+
AB+D
AB+D
AB+DE
AB+DE

AB+DE-FG-+/
(A+B)/(D-E+G-J)
AB+DE-FG-

) ✗
- ✗
) ✗
+
%

AB+DE-FG-+%

AB*DE-
AB*DE-+
(AB)+(D-E)

$\boxed{AB+DE-FG-+\%}$

I → Post

$S=(A*B)+(D-E)$

P	R
(	A
(*	AB
∅	AB*
+	
+(	AB*D
+(-	AB*DE
+(-)	

$(A+B)-C$ a Postfija

P	R
(	A
(+	AB
(+)	AB+
-	AB+C
∅	AB+C-

$(A+B)-C$ a Prefija
$C-(B+A)$

P	R
-	C
-(	CB
-(+	CBA
-(+)	CBA+
-	CBA+-
∅	-+ABC

función Infija a Postfija (Str A)

Return S

función Infija a Prefija (Str A)

A* = Invertir A

B = foncion Infija a Postfija (A*)

B* = Invertimos B

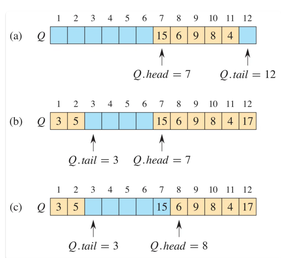
return B*

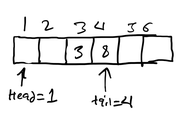
S1: (A+B+C)·D
S2: (B·A·C)-(D%·E)

*++ADCD pre
S1: ABC++D* post
S2: -**BAC/DE pre
BAC**DE/- post

Colas (Queue)

FIFO (firs in, firs out)





Head=3 Tail=5