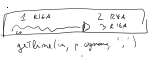
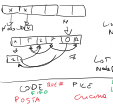

1 RIGA
2 RIGA
getline(in, p.operaio, ';')

1 RIGA

(Coding, documentazione)

LISTA SL struttura
LISTA DL

LISTE ADT


LIST
Number
head,
tail
LIST
node[]

CODE size PILE
POSTA CODA

Pieno che avviene Pur in
Pieno ed anche nel Esp
Lista

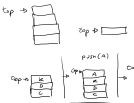
head
tail

ENQUEUE in incremento in testa
DEQUEUE in avanzo in coda (tail)
in testa

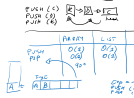
ENQUEUE (A) A → B → C → D → E → B → D
ENQUEUE (C) A → B → C → D → E → B → D → C
DEQUEUE ~~A~~ → C → B → C → D → E → B → C

	ARRAY	LISTA	LISTA DL
ENQUEUE	O(1) (a meno che non ci sia spazio)	O(n)	O(1) in testa O(n) altrimenti
DEQUEUE	O(1) + O(n) per spostamento di tutti i elementi	O(1)	O(1)

PUSH: aggiungere un elemento in testa alla pila
POP: cancellare un elemento dalla testa della pila

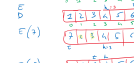

top
top
top → NULL

push(A)
push(n)
top
A
B
C


pop
pop
top
A
B
C

PUSH (C)
PUSH (A)
PUSH (B)
top
A
B
C
pop
top
NULL

	ARRAY	LIST	LIST DL
PUSH POP	O(1) O(1)	O(1) O(1)	O(1) O(1)

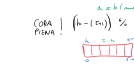

top
A
B
top

top = -1
PUSH (A) → top = 0
PUSH (B) → top = 1

QUEUE
E
D
E(2)
E(8)
E(9)
A B C D E
1 2 3 4 5
A = 1
E = 2
E = (E+1)%6
h E
h = 2
|h-E| = 2
|h-E| = 5
|h-E| = 6

a = b (mod n) h = (h) mod 6

CODA PIENA | (h-(E+1)) % r == 0


h
E
r
0
r-1

|h-E| = 5
|h-E| = 2
E = E+1
|h-(E+1)| = 6
|h-(E+1)| = 0

Queue

T tail
int l
int r
int head, tail

RICAVARE nELEM da HEAD, TAIL

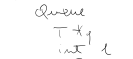
0 1 2 3 4 5
h
E
h
E

6 - (6 % 6) = 6 V
6 - (4 % 6) = 2 V

(E-h) + 1 = 6
(E-h) + 1 = 4

(length - ((E-h) + 1) % length) (E-h) + 1 = 0
1-2 = 0

((E+1) % length) + h =
6 + % 6 + 2 = 2


h
E

(E-h) + 1
E > h
E < h

(h-E) + 1 %

length - ((E-h)+1)

h
E
h
0 1 2 3 4 5

(E-h)+1

h	E	RES
2	1	0 = length +1 - |h-E|
1	0	6
0	2	6
2	0	5 = length+1 - |h-E|
3	1	5
4	1	4 = length+1 - |h-E|
6	2	4

|h-E|=1
|h-E|=2
|h-E|=3

6 = |h-E| 0 6 6 = (+1length - |h-E|) % l
4 = |h-E| 2 6 4 = length-2
3 = |h-E| 3 6 3 = length-3

Queue [+tail is len] ??

a) aggiornando il valore di tail
si → tail +

tail % = length

l=4

tail	head	tail	RES	(E-h)	(E-h)+1
2	0	3	4	2	3
2	1	3	3	6	2
6	2	2	4	3	4
5	3	1	3	2	3

((E-h)+1) % l

≥0 = h

len = (((len - (tail - head)) - 1) % len)

len = 4

4 - (((4 - (2-3)) - 1) % 4) =
= 4 - (((4 - (-1)) - 1) % 4) =
= 4 - (0) = 4 V

0
1
h=3
2

4 - (((4 - (3-0)) - 1) % 4) =
= 4 - 0 ✓

h
t

t > h