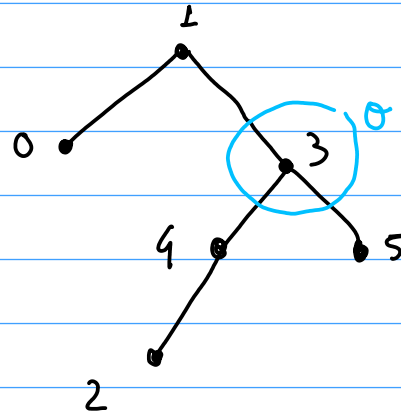


6.

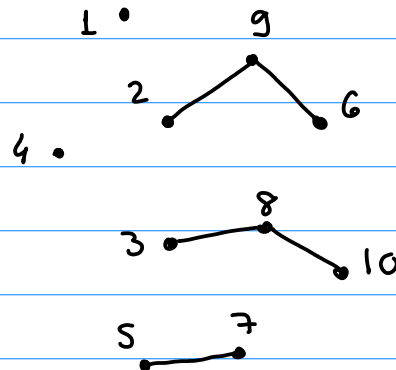


	0	1	2	3	4	5	6
d	∅	∅	∅	0	∅	∅	∅
	2	1	2		1	1	
F	3	1	4	8	∅	2	
u ←	3	1	4	8	∅	2	

lista, fila, pilha

```

dl
format=edgelist1
n=10
data:
2 9
3 8
5 7
6 9
8 10
  
```



```

saída:
1
2 6 9
3 8 10
4
5 7
  
```

$l_v\acute{e}rt = [1, 2, 3, 4, 5 \dots n]$

$l_arest = ["2 9 \backslash n", "3 8 \backslash n" \dots]$

1
2 6 9
3 → 8 → 10
4
5 7

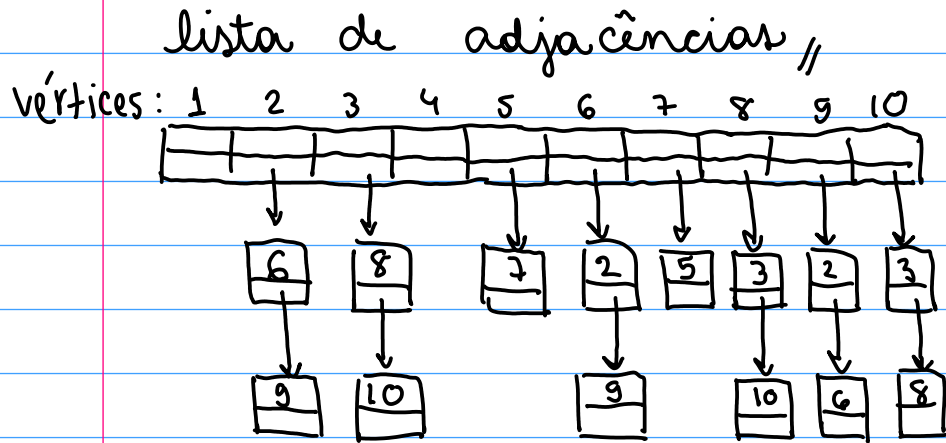
① print 1 /n
remove
②

entrada:

$e = ["dl /n", "format \dots /n", \dots, "8 10 /n"]$

$e[2] \rightarrow n$ $l_v\acute{e}rt$ l_arest

$L_arestas = ["2\ 9/n", "3\ 8/n", \dots]$



entrada

```
dl
format=edgelist1
n=10
data:
2 9
3 8
5 7
6 9
8 10
```

saída:

```
1
2 6 9
3 8 10
4
5 7
```

$L = \underbrace{[\]}_0, \underbrace{[6, 9]}_1, \underbrace{[8, 10]}_2, \dots, \underbrace{[3, 8]}_{n-1}$

→ criar lista L de tam. n

→ posição i da $L \rightarrow$ procurar $i+1$ na L_arest
e add na lista posição i de L

preencher a lista de adj.

criar lista $L \rightarrow L = n * [\]$

for i in range(n)

L_arest

print i

fila: [9]

L_arestas ['2 9\n', '3 8\n', '5 7\n', '6 9\n', '8 10\n']

$\overbrace{(L_arestas[1])}^{L_a}[0] \text{ e } [2]$
aux = *L_a*[0]
linha.append(*L_a*[0])

```
L_arestas_int = []*(2*len(L_arestas))  
for i in range(len(L_aux1)):  
    j = i  
    linha_a = []*n  
    linha_a.append(L_aux1[j])  
    linha_a.append(L_aux1[j+1])  
    j = j+2  
    L_arestas_int.append(linha_a)
```

L_arestas_int [[2,9], [3,8], [5,7], [6,9], [8,10]]
i = 0, 1, 2, 3

+2 $\begin{pmatrix} 0 & 1 \\ 2 & 3 \end{pmatrix}$ +2

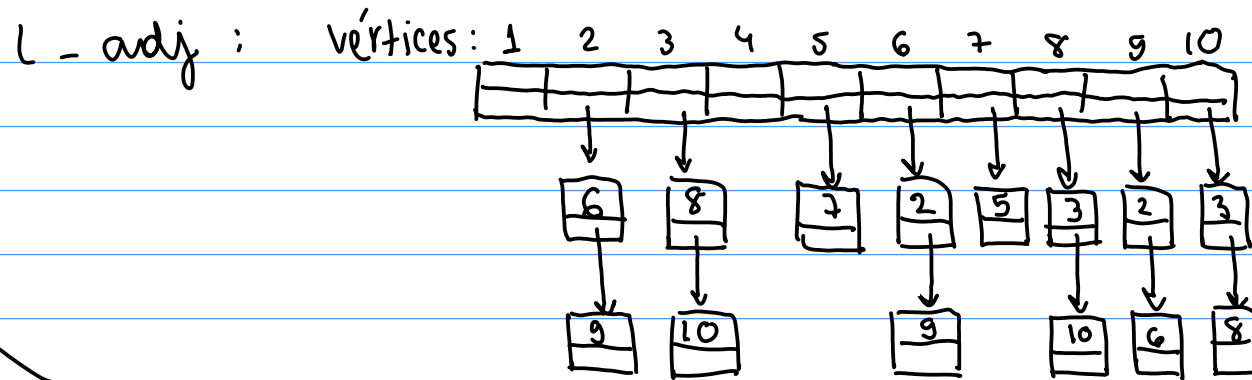
L_arestas_int = [2,9,3,8,5,7,6,9,8,10]

L_aux1 =

V6:

['2 9\n', '3 8\n', '5 7\n', '6 9\n', '8 10\n']

l-arestas-int: [[2, 9], [3, 8], [5, 7], [6, 9], [8, 10]]



l-adj = [⁰[], ¹[6, 9], ²[8, 10], ..., ⁿ⁻¹[3, 8]]

entrada

dl
format=edgelist1
n=10
data:
2 9
3 8
5 7
6 9
8 10

saída:

1
2 6 9
3 8 10
4
5 7

vértices = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

arestas : [[2, 9], [3, 8], [5, 7], [6, 9], [8, 10]]

[2, 5], [1, 3], [2,], [], [1]

lista : [[], [9], [8], [], [7], [9], [5], [3, 10], [2, 6], [8]]

adj 0 1 2 3 4 5 6 7 8 9

visitados : [F, F, F, ..., F]
n vezes

componentes = []
verificar visitados [p] = V

VISITAR // criar componente []

vizinhos = lista_adj[i] → visitados[i] = V → componente.append(i+1)

vizinhos[j] → visitados

entrada

dl
format=edgelist1
n=10
data:
2 9
3 8
5 7
6 9
8 10

saída:

1
2 6 9
3 8 10
4
5 7

