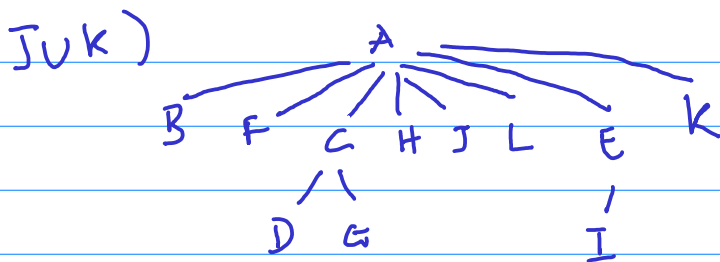
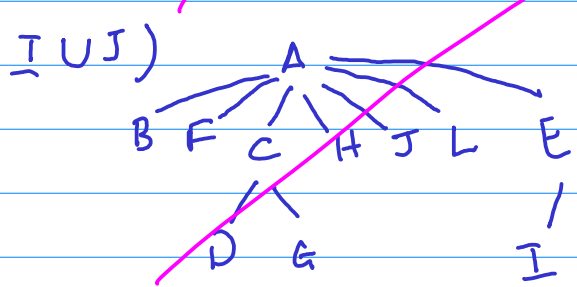
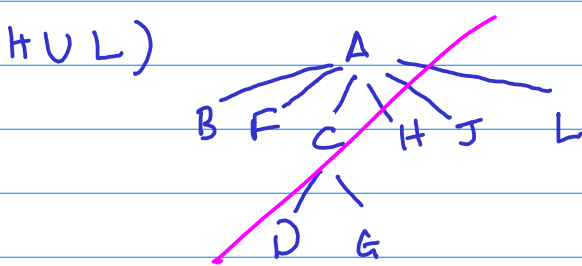
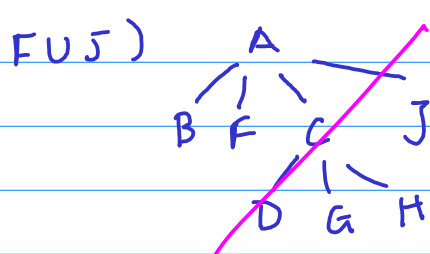
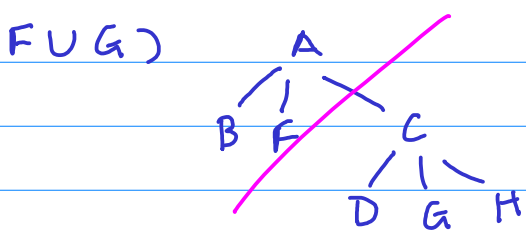
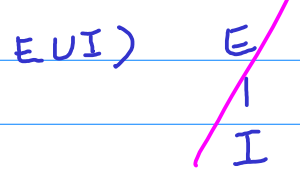
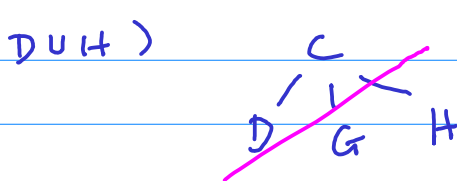
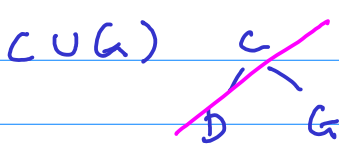
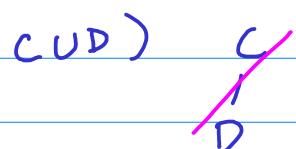
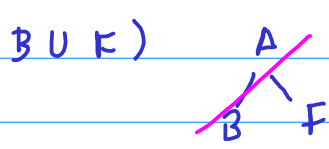
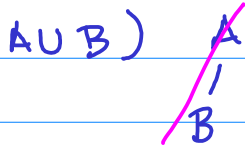


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Q1

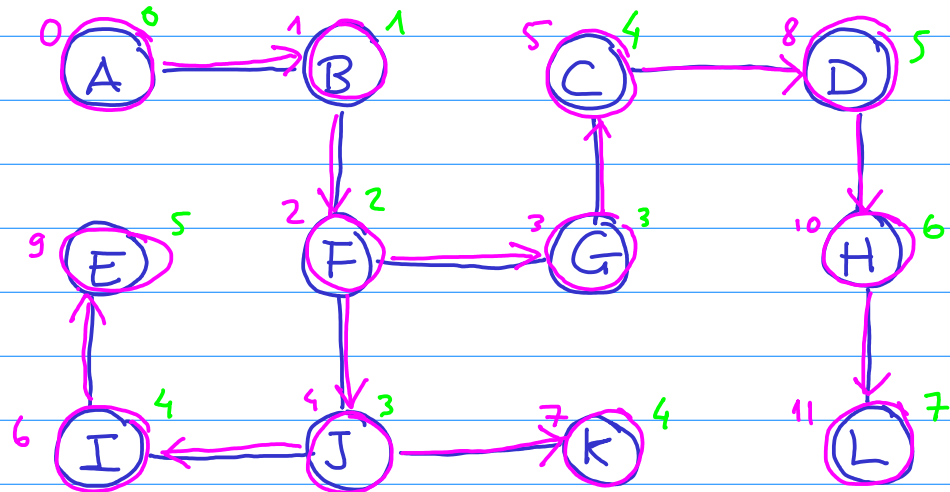
Início: ~~A~~ ~~B~~ ~~C~~ ~~D~~ ~~E~~ ~~F~~ ~~G~~ ~~H~~ ~~I~~ ~~J~~ ~~K~~ ~~L~~



Final

Q2 a) Percurso em Largura - BFS

b)



Ordem BFS
Distância

	A	B	C	D	E	F	G	H	I	J	K	L
BFS =	(0	1	5	8	9	2	3	10	6	4	7	11
D =	(0	1	4	5	5	2	3	6	4	3	4	7
F =	(-	A	G	C	I	B	F	D	J	F	J	H

Q3

a) Programare dinamică

b) $D[m-1, n-1]$

c) $D[0, j] = 1$

d) $D[0, j] = 0$

e) $D[i, 0] = 1$

f) $D[i, 0] = 0$

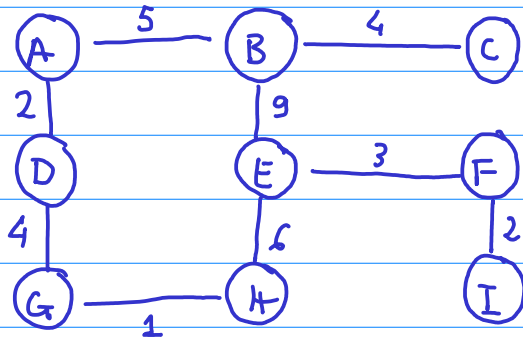
g) $D[i, j] = D[i, j] + D[i-1, j]$

h) $D[i, j] = D[i, j] + D[i, j-1]$

i)

1	1	0	0	0
1	2	2	2	2
1	2	2	2	4
1	0	2	2	6

Q4



	A	B	C	D	E	F	G	H	I
0	0-	∞	∞	∞	∞	∞	∞	∞	∞
1	0-	5A	∞	2A	∞	∞	∞	∞	∞
2	0-	5A	∞	2A	∞	∞	6D	∞	∞
3	0-	5A	5B	2A	14B	∞	6D	∞	∞
4	0-	5A	9B	2A	14B	∞	6D	7G	∞
5	0-	5A	9B	2A	13H	∞	6D	7G	∞
6	0-	5A	9B	2A	13H	∞	6D	7G	∞
7	0-	5A	9B	2A	13H	16E	6D	7G	∞
8	0-	5A	9B	2A	13H	16E	6D	7G	18F
9	0-	5A	9B	2A	13H	16E	6D	7G	18F

Q5

