

- You have 20+10 minutes for this quiz to answer all questions and to key answers online on the Moodle.
- This is an open book test, but during the test some learning quizzes on the Moodle will not be available.

Q1. Floyd-Warshall's search

Given: the following costs matrix and $k=3$.

Cost adjacency matrix

	A	B	C	D	E
A	0	-1	6	inf	inf
B	inf	0	inf	5	2
C	6	inf	0	2	1
D	-6	6	inf	0	inf
E	-1	inf	inf	-1	0

Dist (k=3)

	A	B	C	D	E
A					
B					
C					
D					
E					

Next (k=3)

	A	B	C	D	E
A					
B					
C					
D					
E					

Find: Dist and Next for row A.

ANSWER

Cost adjacency matrix

	A	B	C	D	E
A	0	-1	6	inf	inf
B	inf	0	inf	5	2
C	6	inf	0	2	1
D	-6	6	inf	0	inf
E	-1	inf	inf	-1	0

Dist (k=3)

	A	B	C	D	E
A	-2	-3	4	2	-3
B	-1	-2	5	3	-2
C	-4	-5	0	0	-5
D	-8	-9	-2	-4	-9
E	-9	-10	-3	-5	-14

Next (k=3)

	A	B	C	D	E
A	D	D	D	D	D
B	D	D	D	D	D
C	D	D	C	D	D
D	D	D	D	D	D
E	D	D	D	D	D

Dist: -2,-3,4,2,-3

Next: D,D,D,D,D