

上次作业做成第六次了，这次是第五次。

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yxu, yxvu, yxwvu

ywxu, ywxvu, ywvu, ywvxu

yzwxu, yzwxvu, yzwwu, yzwwxu

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	x	y	z
x	0	3	4
y			
z			

	x	y	z
x	0	3	4
y	3	0	6
z	4	6	0

	x	y	z
x			
y	3	0	6
z			

	x	y	z
x	0	3	4
y	3	0	6
z	4	6	0

	x	y	z
x			
y			
z	4	6	0

	x	y	z
x	0	3	4
y	3	0	6
z	4	6	0

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No, because it does not create a loop.

Connecting two nodes is just to decrease the direct link weight from infinity to some value.

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The Bellman-Ford algorithm will end up at N-1 round.

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a)

w	inform y Dw(x) = inf
w	inform z Dw(x) = 5
y	inform w Dy(x) = 4
y	inform z Dy(x) = 4
z	inform w Dz(x) = inf
z	inform y Dz(x) = 6

b)

$w \rightarrow x = (5, y), (10, y), \dots, (50, y), (51, z)$

$y \rightarrow x = (4, x), (9, z), \dots, (53, z), (52, z)$

$z \rightarrow x = (6, w), (11, z), \dots, (50, x),$

30 steps in total

c)

cut y-z link