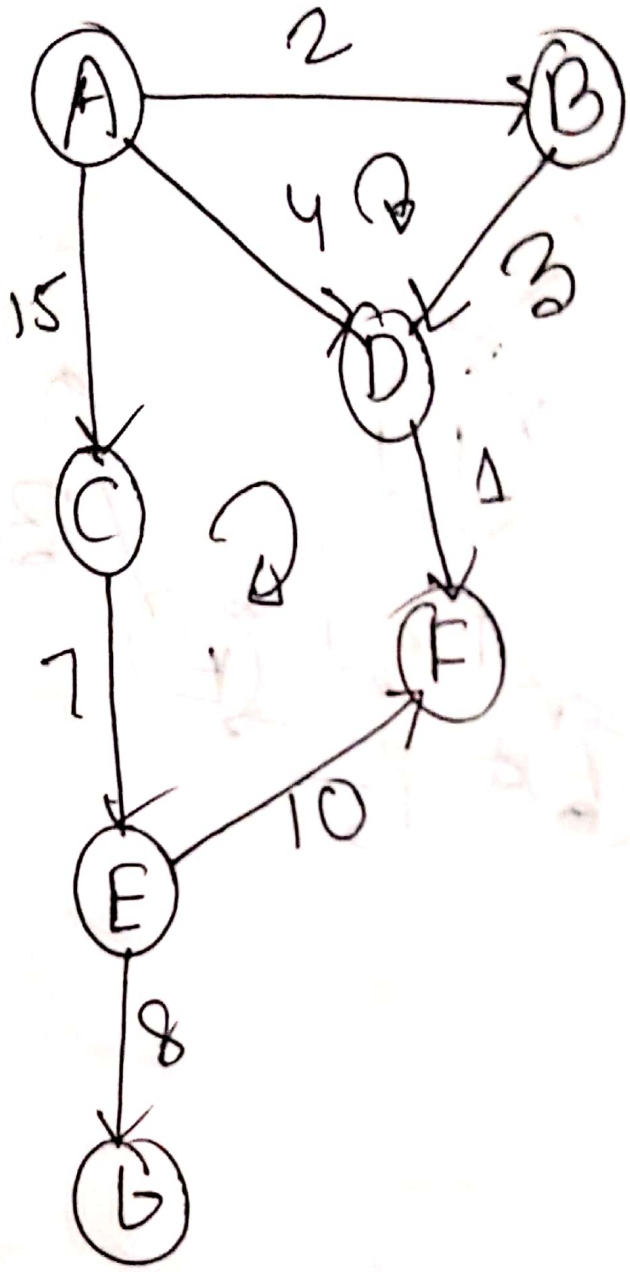
1



There are 2 cycles.

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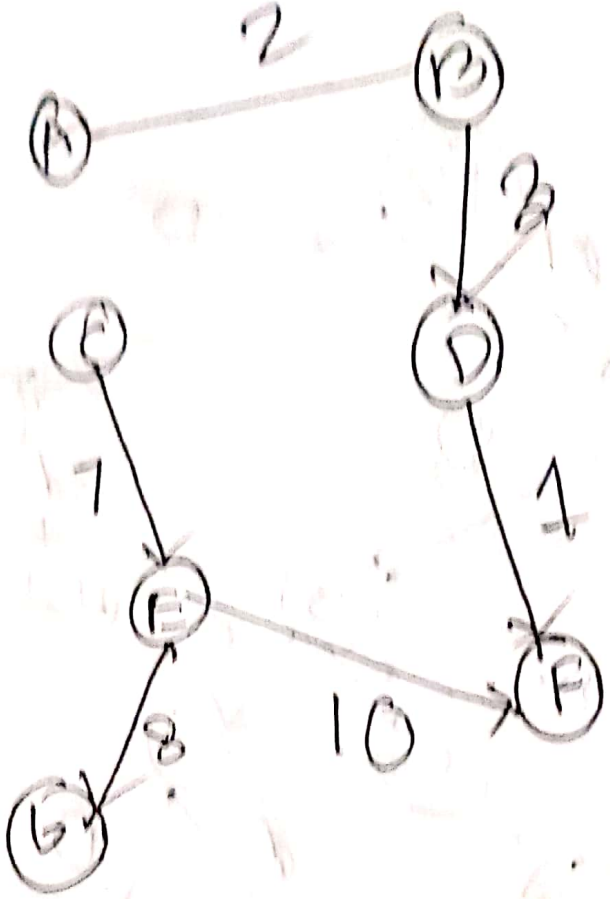
(1)



The path doesn't exist here.

B → A → C

If total cost → 31

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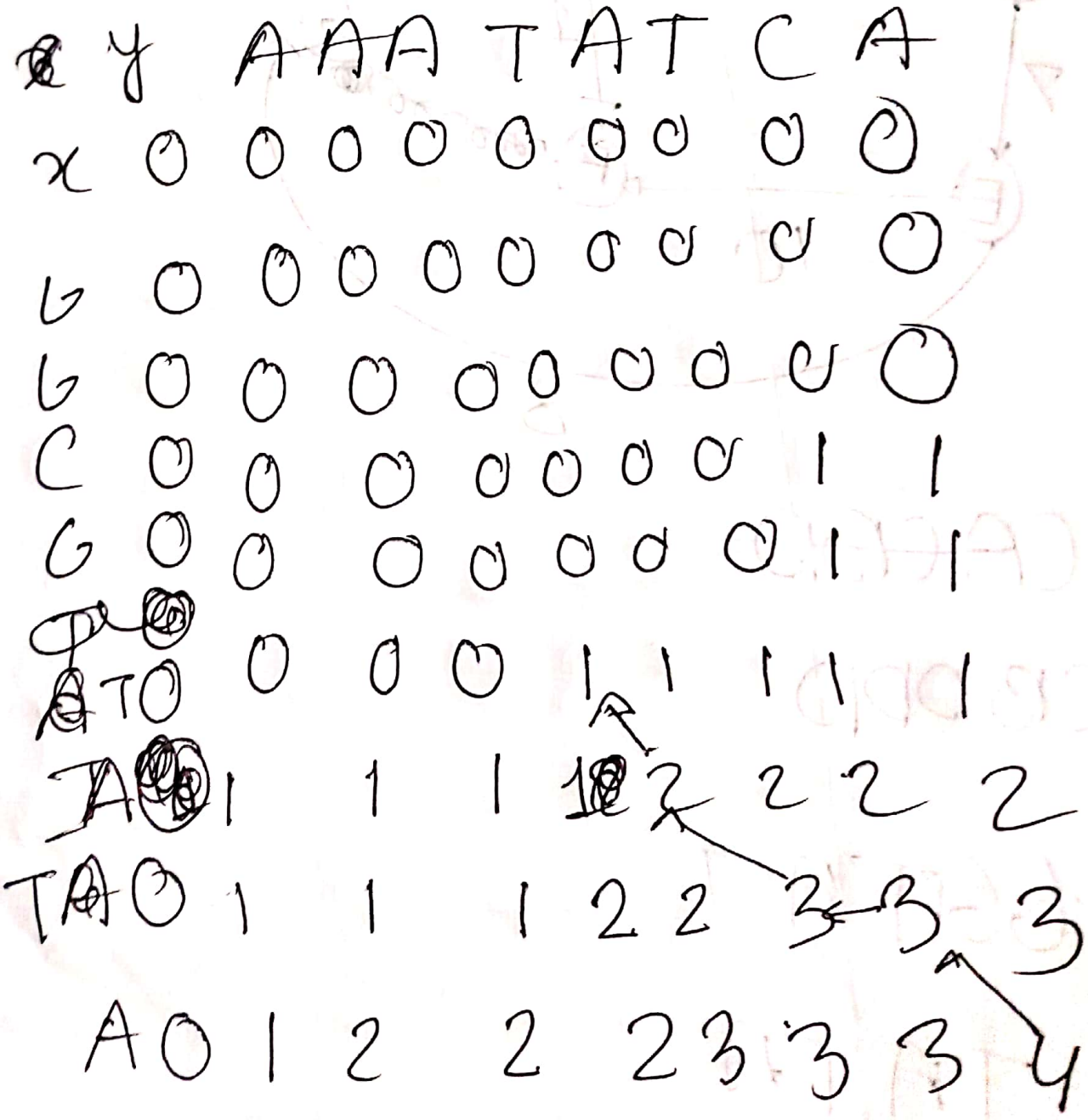
(1) Given,

Chiken : GGCGTATA

& American alligator : AAATATCA



Common : TATA

Given : GGGGTATA

Goal : TAGGTATC

		T	A	G	G	T	A	T	C
		0	0	0	0	0	0	0	0
G	0	0	0	0	1	1	1	1	1
G	0	0	0	0	1	1	1	1	1
G	0	0	0	0	1	1	1	1	1
G	0	0	0	0	1	2	2	2	2	2
T	0	1	1	1	1	2	2	2	2	2
A	0	1	2	2	2	3	4	4	4
T	0	1	2	2	2	3	4	5	5
A	0	1	2	2	2	3	4	5	5

Common : CGTAT

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(3) Method

Dinasaur : bbCTATCC

Alligator : AAATATCA

		A	A	A	T	A	T	C	A
	0	0	0	0	0	0	0	0	0
b	0	0	0	0	0	0	0	0	0
b	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	1	1
T	0	0	0	0	0	1	1	1	1
A	0	0	1	1	1	1	2	2	2
T	0	0	1	1	1	2	2	3	3
C	0	0	1	1	1	2	2	3	4
C	0	0	1	1	1	2	2	3	4

Common → TATC

$\frac{4}{8} \times 100\%$

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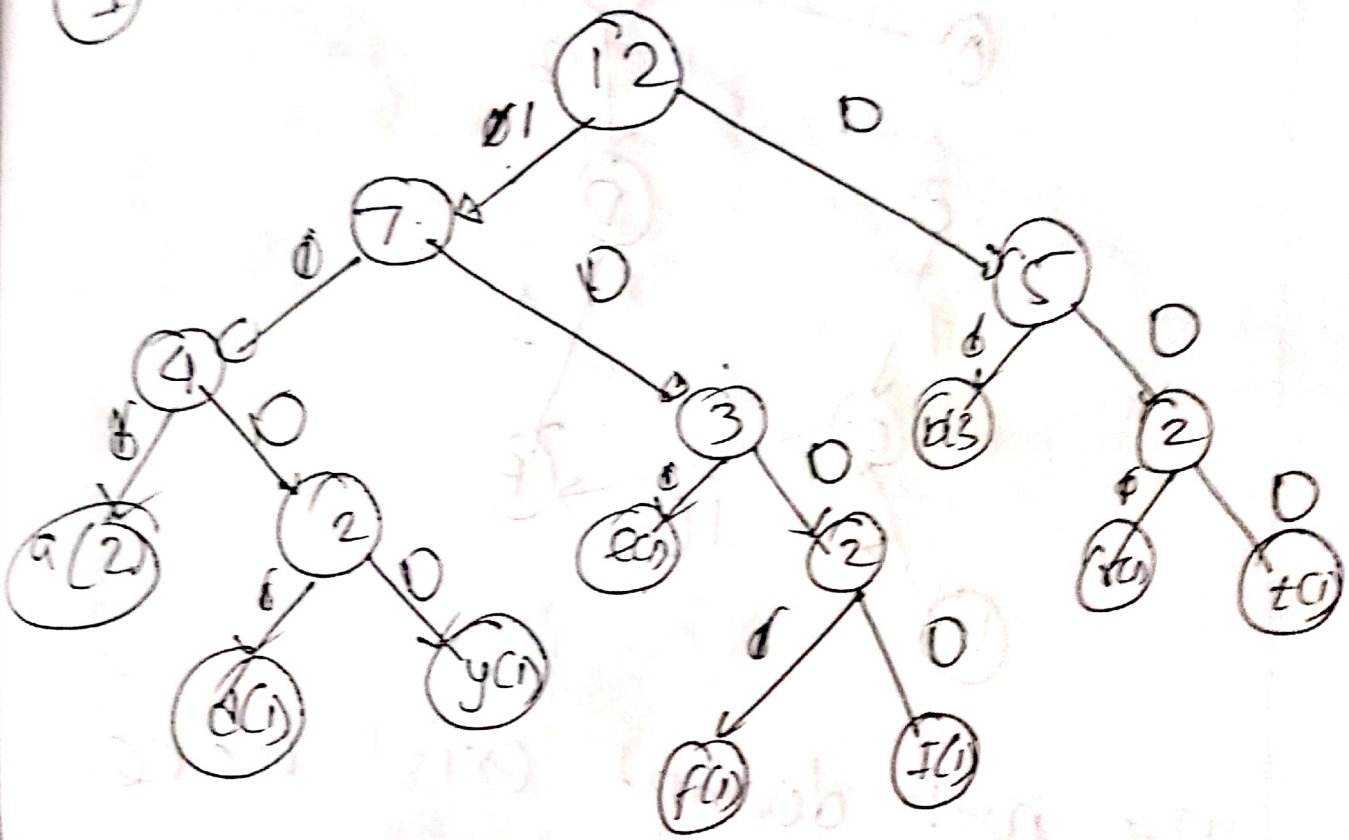

Here,

y ⇒ 1100
a → 101
f → 100
b - 01
e - 001
t ⇒ 000

r - 1101
d - 1110
l - ~~100~~1111

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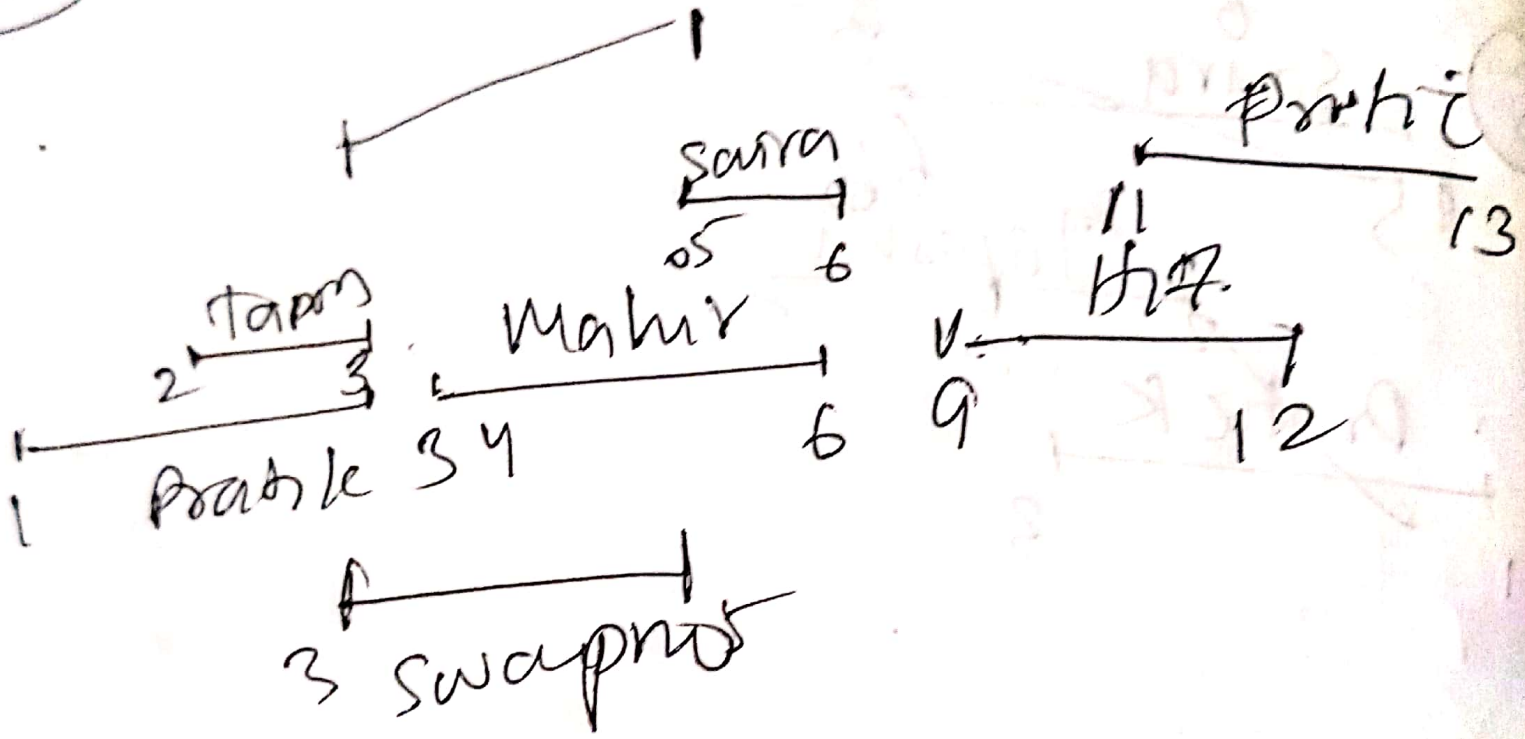
8



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