

Q1)

N

D(A)

D(B)

D(C)

D(D)

D(F)

D(G)

D(H)

P(A)

P(B)

P(C)

P(D)

P(F)

P(G)

P(H)

E

 $\infty, -$ $\infty, -$

3, E

2, E

2, E

 $\infty, -$ $\infty, -$

E, D

 $\infty, -$

11, D

3, E

2, E

3, D

 $\infty, -$

E, D, F

 $\infty, -$

11, D

3, E

3, D

 $\infty, -$

E, D, F, C

7, C

5, C

3, D

 $\infty, -$

E, D, F, C, G

7, C

5, C

16, G

E, D, F, C, G, B

6, B

7, B

E, D, F, C, G, B, A

7, B

E, D, F, C, G, B, A, H

The Shortest Path from E to

A: ECBA - 6

B: ECB - 5

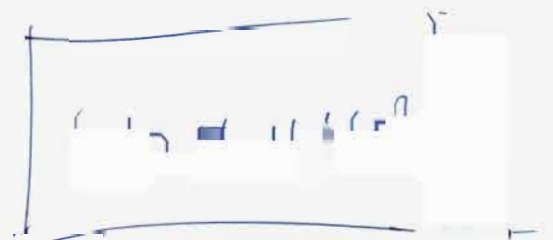
C: EC - 3

D: ED - 2

F: EF - 2

G: EDG - 3

H: ECBH - 7



(Q2)

Destination	Distance	Route
Net 6	10	Gate J
Net 24	5	Gate J
Net 43	5	Gate J

For destination Net 6,

it updates that a new route is setup via gateway J.

For destination Net 24,

it updates that a shorter distance resulting from routing via gateway J.

For destination Net 43.,

it updates that if passing via gateway J,

it will take a longer route.

Q3)

\bar{I}) 7

\bar{II}) 7

\bar{III}) ∞

\bar{IV}) ∞

\bar{IX}) A-B-D-C

\bar{X}) ∞

\bar{XI}) 11

\bar{V}) ∞

\bar{VI}) 5

\bar{VII}) ∞

\bar{VIII}) ∞

\bar{XII}) D-A-B-D-C

\bar{XIII}) 14

Q4)

1. y updates

$\text{vec } y := (6, 0, 17)$

2. x updates

$\text{vec } x := (0, 6, 23)$

3. x updates

$\text{vec } y := (6, 0, 29)$

4. x updates

$\text{vec } x := (0, 6, 35)$

5. y updates

$\text{vec } y := (6, 0, 41)$

6. x updates

$\text{vec } x := (0, 6, 37)$

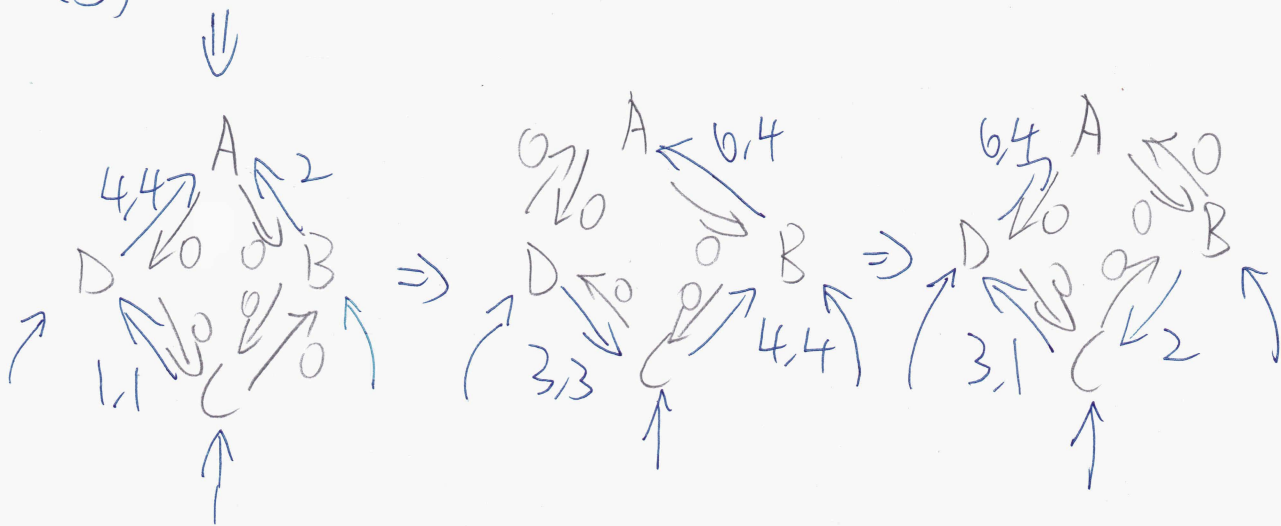
7. y updates

$\text{vec } y := (6, 0, 43)$

8. x updates

$\text{vec } x := (0, 6, 37)$

Q5)



Q6)

i) False,

B gets "revenue" for routing ABX since X is B's customers.

ii) True,

W gets no "revenue" for routing AC since none of AC are W's customers.

iii) True,

A gets no "revenue" for routing CABX since none of CABX are A's customers

iv) False,

A gets "revenue" for routing WABX since W is A's customers.