Q1

N	A	B	C	D	F	G	H
E	∞, -	∞, -	3, E	2, E	2, E	∞, -	∞, -
E, D	∞, -	11, D	3, E		2, E	3, D	∞, -
E, D, F	∞, -	11, D	3, E			3, D	∞, -
E, D, F, C	7, C	5, C				3, D	∞, -
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 Node E to

A: ECBA - 6

B: ECB - 5

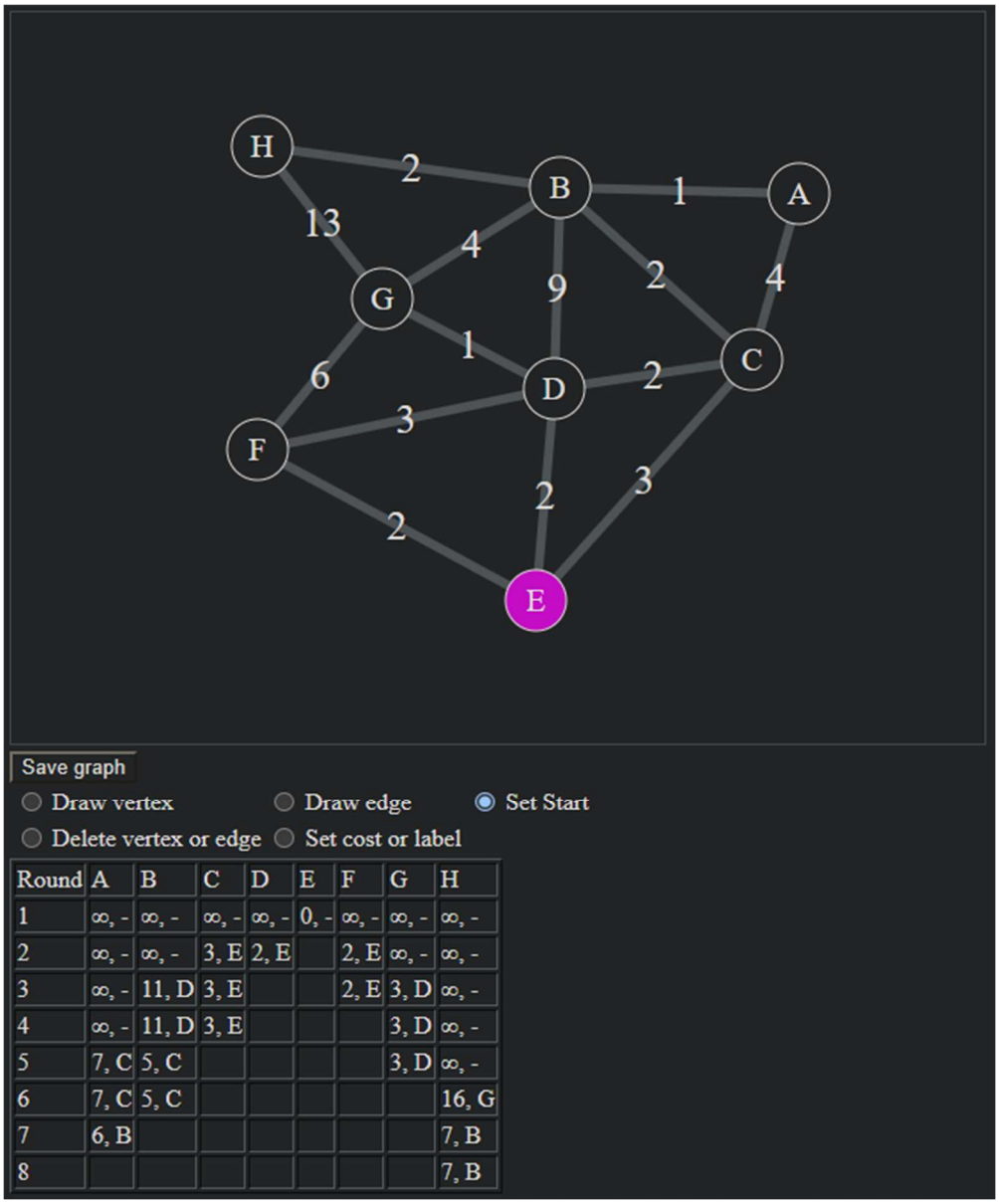
C: EC - 3

D: ED - 2

F: EF - 2

G: EDG - 3

H: ECBH - 7



Round	A	B	C	D	E	F	G	H
1	∞, -	∞, -	∞, -	∞, -	0, -	∞, -	∞, -	∞, -
2	∞, -	∞, -	3, E	2, E		2, E	∞, -	∞, -
3	∞, -	11, D	3, E			2, E	3, D	∞, -
4	∞, -	11, D	3, E				3, D	∞, -
5	7, C	5, C					3, D	∞, -
6	7, C	5, C						16, G
7	6, B							7, B
8								7, B

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.

		table		K	table	J			
dist %		dest	distance	route	dest	distance	new dist		new route
3		1	0	D	1	2	5	old	
		2	0	D				old	
		4	8	L	4	8	11	old	
					6	7	10	new	J
		16	9	M	16	7	10	old	
		24	8	J	24	2	5	new	J
		40	5	Q	40	8	11	old	
		43	4	J	43	2	5	new	J

Q3

i. 7

ii. 7

iii. ∞

iv. ∞

v. ∞

vi. ∞

vii. 8

viii. ∞

ix. A-B-D-C

x. ∞

xi. 8

xii. D-A-B-D-C

xiii. 14

Q4

1. y updates its vector:

   Dist. vector y: (6, 0, 17)

2. z updates its vector:

   Dist. vector z: (23, 12, 0)

3. y updates its vector:

   Dist. vector y: (6, 0, 29)

4. z updates its vector:

   Dist. vector z: (35, 12, 0)

5. y updates its vector:

   Dist. vector y: (6, 0, 41)

6. z updates its vector:

   Dist. vector z: (37, 12, 0)

7. y updates its vector:

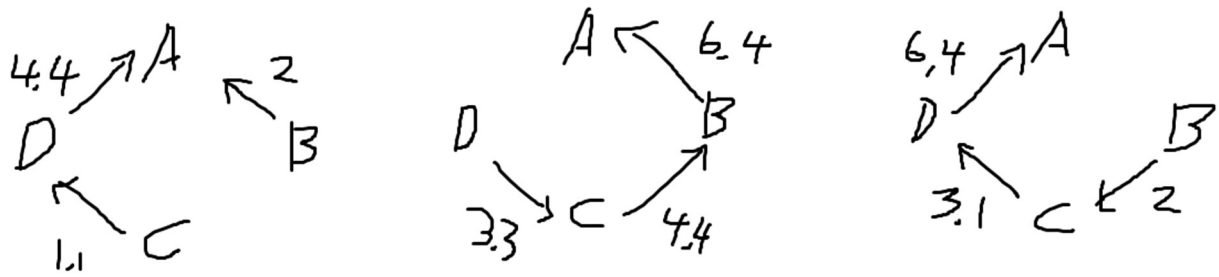
   Dist. vector y: (6, 0, 43)

8. z updates its vector:

   Dist. vector z: (37, 12, 0)

	x	y	z		
x	0	6	11	new xy	6
y	6	0	5	new xz	37
z	11	5	0	new yz	44
y	6	0	17		
z	23	12	0		
y	6	0	29		
z	35	12	0		
y	6	0	41		
z	37	12	0		
y	6	0	43		
z	37	12	0	done	

Q5



	input: edge value									
1	AD		AB		B	CL	3.3	min	3.1	ACL
	DA	3.3	BA	3.1		ACL	3.1			
					C	CL	3.3	min	3.3	CL
	CD		BC			ACL	4.2			
	DC		CB	1.1	D	CL	3.3	min	3.3	CL
						ACL	4.2			
	input: edge value									
2	AD		AB		B	CL	5.5	min	2	ACL
	DA	4.4	BA	2		ACL	2			
					C	CL	5.5	min	2	ACL
	CD	1.1	BC			ACL	2			
	DC		CB		D	CL	4.4	min	2	ACL
						ACL	2			
	input: edge value									
3	AD		AB		B	CL	0	min	0	CL
	DA		BA	6.4		ACL	6.4			
					C	CL	0	min	0	CL
	CD		BC			ACL	10.8			
	DC	3.3	CB	4.4	D	CL	0	min	0	CL
						ACL	14.1			

Q6.

i. False, B gets “revenue” for routing ABX since X is B’s customer.

ii. True, W gets no “revenue” for routing AC since none of them are W’s customer.

iii. True, A gets no “revenue” for routing CABX since none of them are A’s customer.

iv. False, A gets “revenue” for routing WABX since W is A’s customer.