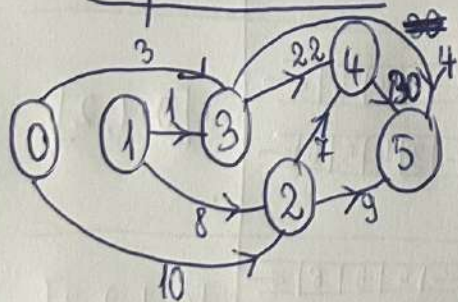


(4) G_1 Input file:

6	9	
0	2	10
0	3	3
1	2	8
1	3	1
2	4	7
3	4	22
2	5	9
3	5	4
4	5	30

Representation:



Topological sorting orders:

0, 1, 2, 3, 4, 5
 0, 1, 3, 2, 4, 5
 1, 0, 2, 3, 4, 5
 1, 0, 3, 2, 4, 5

Highest cost paths:

0 → 5:
 path of highest cost: 0, 3, 4, 5
 cost: 55

0 → 4:
 path of highest cost: 0, 3, 4
 cost: 25

G₂ Input file:

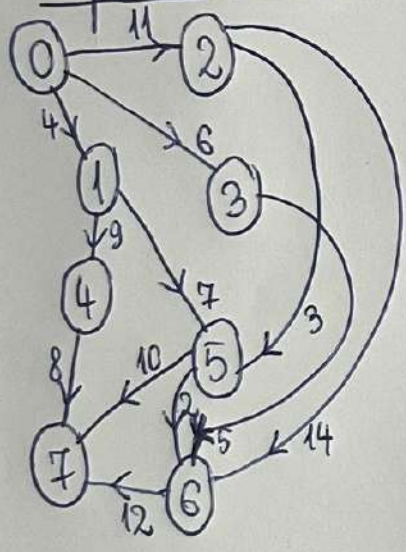
```

8 12
0 1 4
0 2 11
0 3 6
1 4 9
1 5 7
2 5 3
2 6 14
3 6 5
4 7 8
5 6 2
5 7 10
6 7 12
    
```

Manual execution:

iterations	x, y	count: dictionary	q: queue	sorted: list
initialization		<div>0 1 2 3 4 5 6 7</div> <div>0 1 1 1 1 2 3 3</div>	<div>← 0 →</div>	[]
it. 1	x=0 y=1 y=2 y=3	<div>0 1 2 3 4 5 6 7</div> <div>0 0 0 0 1 2 3 3</div>	<div>1</div> <div>← 1 2 3 →</div>	[0]
it. 2	x=1 y=4 y=5	<div>0 1 2 3 4 5 6 7</div> <div>0 0 0 0 0 1 3 3</div>	<div>← 2 3 →</div> <div>← 2 3 4 5 →</div>	[0, 1]
it. 3	x=2 y=5 y=6	<div>0 1 2 3 4 5 6 7</div> <div>0 0 0 0 0 0 2 3</div>	<div>← 3 4 5 →</div> <div>← 3 4 5 6 →</div>	[0, 1, 2]
it. 4	x=3 y=6	<div>0 1 2 3 4 5 6 7</div> <div>0 0 0 0 0 0 1 3</div>	<div>← 4 5 6 →</div> <div>← 4 5 6 →</div>	[0, 1, 2, 3]
it. 5	x=4 y=7	<div>0 1 2 3 4 5 6 7</div> <div>0 0 0 0 0 0 1 2</div>	<div>← 5 6 →</div> <div>← 5 6 7 →</div>	[0, 1, 2, 3, 4]
it. 6	x=5 y=6 y=7	<div>0 1 2 3 4 5 6 7</div> <div>0 0 0 0 0 0 0 1</div>	<div>← 6 7 →</div> <div>← 6 7 →</div>	[0, 1, 2, 3, 4, 5]
it. 7	x=6 y=7	<div>0 1 2 3 4 5 6 7</div> <div>0 0 0 0 0 0 0 0</div>	<div>← 7 →</div> <div>← 7 →</div>	[0, 1, 2, 3, 4, 5, 6]
it. 8	x=7		← ←	[0, 1, 2, 3, 4, 5, 6, 7]

Representation:



G₂ is a DAG, because size of (sorted) = 8 (the number of vertices of G₂).