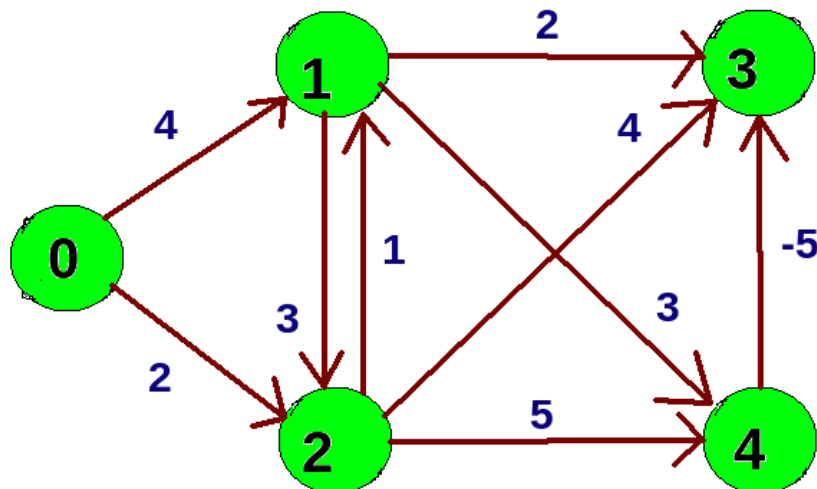


Manual execution of a simple graph

Graph data:

```
5 9
0 1 4
0 2 2
1 2 3
1 3 2
1 4 3
2 1 1
2 3 4
2 4 5
4 3 -5
```

Graph visualization



Source vertex: 0, Target vertex 3

Iteration 1

Flag: True

Edge: (0, 1)

Distance: [0, 4, inf, inf, inf]

Predecessor: [False, 0, False, False, False]

Flag: True

Edge: (0, 2)

Distance: [0, 4, 2, inf, inf]

Predecessor: [False, 0, 0, False, False]

Flag: True

Edge: (1, 2)

Distance: [0, 4, 2, inf, inf]

Predecessor: [False, 0, 0, False, False]

Flag: True

Edge: (1, 3)
Distance: [0, 4, 2, 6, inf]
Predecessor: [False, 0, 0, 1, False]

Flag: True
Edge: (1, 4)
Distance: [0, 4, 2, 6, 7]
Predecessor: [False, 0, 0, 1, 1]

Flag: True
Edge: (2, 1)
Distance: [0, 3, 2, 6, 7]
Predecessor: [False, 2, 0, 1, 1]

Flag: True
Edge: (2, 3)
Distance: [0, 3, 2, 6, 7]
Predecessor: [False, 2, 0, 1, 1]

Flag: True
Edge: (2, 4)
Distance: [0, 3, 2, 6, 7]
Predecessor: [False, 2, 0, 1, 1]

Flag: True
Edge: (4, 3)
Distance: [0, 3, 2, 2, 7]
Predecessor: [False, 2, 0, 4, 1]

Iteration 2

Flag: False
Edge: (0, 1)
Distance: [0, 3, 2, 2, 7]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (0, 2)
Distance: [0, 3, 2, 2, 7]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (1, 2)
Distance: [0, 3, 2, 2, 7]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (1, 3)
Distance: [0, 3, 2, 2, 7]
Predecessor: [False, 2, 0, 4, 1]

Flag: True
Edge: (1, 4)
Distance: [0, 3, 2, 2, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: True
Edge: (2, 1)
Distance: [0, 3, 2, 2, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: True
Edge: (2, 3)
Distance: [0, 3, 2, 2, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: True
Edge: (2, 4)
Distance: [0, 3, 2, 2, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: True
Edge: (4, 3)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Iteration 3

Flag: False
Edge: (0, 1)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (0, 2)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (1, 2)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (1, 3)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (1, 4)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (2, 1)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (2, 3)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (2, 4)
Distance: [0, 3, 2, 1, 6]
Predecessor: [False, 2, 0, 4, 1]

Flag: False
Edge: (4, 3)
Distance: [0, 3, 2, 1, 6]

Predecessor: [False, 2, 0, 4, 1]