Initial distance matrix:

0 16 INF 2 INF INF 11 INF

INF 0 6 INF INF INF INF INF

INF INF 0 INF INF INF INF INF

INF INF 8 0 3 INF INF INF

INF INF INF INF 0 INF INF INF

INF INF INF INF 2 0 7 INF

INF INF INF INF INF INF 0 INF

INF 5 INF INF INF 4 INF 0

Initial next matrix:（A 到其他点的路径）

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

Updated distance matrix:

0 16 22 2 INF INF 11 INF

INF 0 6 INF INF INF INF INF

INF INF 0 INF INF INF INF INF

INF INF 8 0 3 INF INF INF

INF INF INF INF 0 INF INF INF

INF INF INF INF 2 0 7 INF

INF INF INF INF INF INF 0 INF

INF 5 INF INF INF 4 INF 0

Updated next matrix:

0 1 1 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

Updated distance matrix:

0 16 22 2 INF INF 11 INF

INF 0 6 INF INF INF INF INF

INF INF 0 INF INF INF INF INF

INF INF 8 0 3 INF INF INF

INF INF INF INF 0 INF INF INF

INF INF INF INF 2 0 7 INF

INF INF INF INF INF INF 0 INF

INF 5 11 INF INF 4 INF 0

Updated next matrix:

0 1 1 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 1 3 4 5 6 7

Updated distance matrix:

0 16 10 2 INF INF 11 INF

INF 0 6 INF INF INF INF INF

INF INF 0 INF INF INF INF INF

INF INF 8 0 3 INF INF INF

INF INF INF INF 0 INF INF INF

INF INF INF INF 2 0 7 INF

INF INF INF INF INF INF 0 INF

INF 5 11 INF INF 4 INF 0

Updated next matrix:

0 1 3 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 1 3 4 5 6 7

Updated distance matrix:

0 16 10 2 5 INF 11 INF

INF 0 6 INF INF INF INF INF

INF INF 0 INF INF INF INF INF

INF INF 8 0 3 INF INF INF

INF INF INF INF 0 INF INF INF

INF INF INF INF 2 0 7 INF

INF INF INF INF INF INF 0 INF

INF 5 11 INF INF 4 INF 0

Updated next matrix:

0 1 3 3 3 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 1 3 4 5 6 7

Updated distance matrix:

0 16 10 2 5 INF 11 INF

INF 0 6 INF INF INF INF INF

INF INF 0 INF INF INF INF INF

INF INF 8 0 3 INF INF INF

INF INF INF INF 0 INF INF INF

INF INF INF INF 2 0 7 INF

INF INF INF INF INF INF 0 INF

INF 5 11 INF 6 4 INF 0

Updated next matrix:

0 1 3 3 3 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 1 3 5 5 6 7

Updated distance matrix:

0 16 10 2 5 INF 11 INF

INF 0 6 INF INF INF INF INF

INF INF 0 INF INF INF INF INF

INF INF 8 0 3 INF INF INF

INF INF INF INF 0 INF INF INF

INF INF INF INF 2 0 7 INF

INF INF INF INF INF INF 0 INF

INF 5 11 INF 6 4 11 0

Updated next matrix:

0 1 3 3 3 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 1 3 5 5 5 7

Final distance matrix after Floyd-Warshall:

Final distance matrix:

0 16 10 2 5 INF 11 INF

INF 0 6 INF INF INF INF INF

INF INF 0 INF INF INF INF INF

INF INF 8 0 3 INF INF INF

INF INF INF INF 0 INF INF INF

INF INF INF INF 2 0 7 INF

INF INF INF INF INF INF 0 INF

INF 5 11 INF 6 4 11 0

Final next matrix after Floyd-Warshall:

Final next matrix:

0 1 3 3 3 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7

0 1 1 3 5 5 5 7

Shortest path from 0 to 1: 0 -> 1

Shortest Distance: 16

Shortest path from 0 to 2: 0 -> 3 -> 2

Shortest Distance: 10

Shortest path from 0 to 3: 0 -> 3

Shortest Distance: 2

Shortest path from 0 to 4: 0 -> 3 -> 4

Shortest Distance: 5

Shortest path from 0 to 5: 0 -> 5

Shortest Distance: Infinity

Shortest path from 0 to 6: 0 -> 6

Shortest Distance: 11

Shortest path from 0 to 7: 0 -> 7

Shortest Distance: Infinity