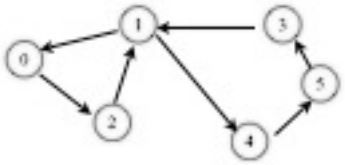


The original adjacency matrix.

0	9	1	9	9	9
1	0	9	9	1	9
9	1	0	9	9	9
9	1	9	0	9	9
9	9	9	9	0	1
9	9	9	1	9	0

The D matrix after running FWI.

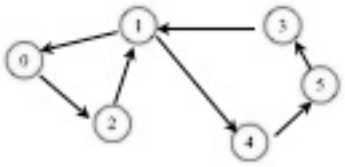
0	2	1	5	3	4
1	0	2	3	1	2
2	1	0	4	2	3
2	1	3	0	2	3
4	3	5	2	0	1
3	2	4	1	3	0

The path matrix

-1	2	0	5	1	4
1	-1	0	5	1	4
1	2	-1	5	1	4
1	3	0	-1	1	4
1	3	0	5	-1	4
1	3	0	5	1	-1

```
// Initialize d and path
  for( int i = 0; i < n; i++ )
      for( int j = 0; j < n; j++ ){
          d[ i ][ j ] = a[ i ][ j ];
          if (a[i] [j] > 0 & a[i][j] < INFINITY)
             path [i] [j] = i;
          else
              path [i][j] = NOT_A_VERTEX;
       }
```

```
for( int k = 0; k < n; k++ ){
 for( int i = 0; i < n; i++ )
  for( int j = 0; j < n; j++ )
   if( d[ i ][ k ] + d[ k ][ j ] < d[ i ][ j]{
    // Update shortest path
        d[ i ][ j ] = d[ i ][ k ] + d[ k ][ j ];
        path[i][j] = path[k][j]
        }
```



The original adjacency matrix.

0	9	1	9	9	9
1	0	9	9	1	9
9	1	0	9	9	9
9	1	9	0	9	9
9	9	9	9	0	1
9	9	9	1	9	0

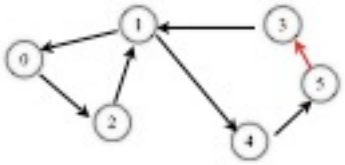
The D matrix after running FWI.

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

The path matrix

-1	2	0	5	1	4
1	-1	0	5	1	4
1	2	-1	5	1	4
1	3	0	-1	1	4
1	3	0	5	-1	4
1	3	0	5	1	-1

The path from 0 to 3 is of length 5.



The original adjacency matrix.

0	9	1	9	9	9
1	0	9	9	1	9
9	1	0	9	9	9
9	1	9	0	9	9
9	9	9	9	0	1
9	9	9	1	9	0

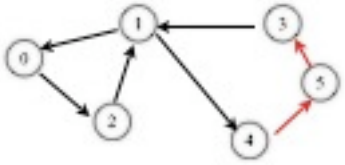
The D matrix after running FWI.

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

The path matrix

-1	2	0	5	1	4
1	-1	0	5	1	4
1	2	-1	5	1	4
1	3	0	-1	1	4
1	3	0	5	-1	4
1	3	0	5	1	-1

Path (0,3) is 5.



The original adjacency matrix.

0	9	1	9	9	9
1	0	9	9	1	9
9	1	0	9	9	9
9	1	9	0	9	9
9	9	9	9	0	1
9	9	9	1	9	0

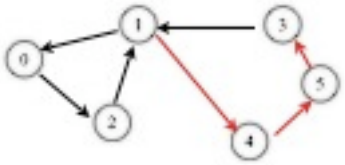
The D matrix after running FWI.

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

The path matrix

-1	2	0	5	1	4
1	-1	0	5	1	4
1	2	-1	5	1	4
1	3	0	-1	1	4
1	3	0	5	-1	4
1	3	0	5	1	-1

Path (0,5) is 4.



The original adjacency matrix.

0	9	1	9	9	9
1	0	9	9	1	9
9	1	0	9	9	9
9	1	9	0	9	9
9	9	9	9	0	1
9	9	9	1	9	0

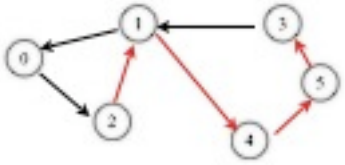
The D matrix after running FWI.

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

The path matrix

-1	2	0	5	1	4
1	-1	0	5	1	4
1	2	-1	5	1	4
1	3	0	-1	1	4
1	3	0	5	-1	4
1	3	0	5	1	-1

Path (0,4) is 1.



The original adjacency matrix.

0	9	1	9	9	9
1	0	9	9	1	9
9	1	0	9	9	9
9	1	9	0	9	9
9	9	9	9	0	1
9	9	9	1	9	0

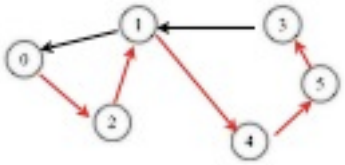
The D matrix after running FWI.

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

The path matrix

-1	2	0	5	1	4
1	-1	0	5	1	4
1	2	-1	5	1	4
1	3	0	-1	1	4
1	3	0	5	-1	4
1	3	0	5	1	-1

Path (0,1) is 2.



The original adjacency matrix.

0	9	1	9	9	9
1	0	9	9	1	9
9	1	0	9	9	9
9	1	9	0	9	9
9	9	9	9	0	1
9	9	9	1	9	0

The D matrix after running FWI.

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

The path matrix

-1	2	0	5	1	4
1	-1	0	5	1	4
1	2	-1	5	1	4
1	3	0	-1	1	4
1	3	0	5	-1	4
1	3	0	5	1	-1

Path (0,2) is 0.