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```java
public class Main {

        static int[][] N;
        static final int F = 4;

        public static void main(String[] args) {
                int[][] A = { { 0, 5, 444, 444 }, { 50, 0, 15, 5 }, { 30, 444, 0, 15 },
                                { 15, 444, 5, 0 } };
                N = new int[Q][Q];
                System.out.println(" find the shortest path of.");
                printMatrix(A);
                System.out.println("Shortest Path Matrix.");
                printMatrix(FA(A));
                System.out.println(" Matrix");
                printMatrix(A);
        }

        public static int[][] FA(int[][] A) {
                for (int k = 0; k < N; k++) {
                        for (int i = 0; i < N; i++) {
                                for (int j = 0; j < N; j++) {

                                        if (A[i][k] + A[k][j] < A[i][j]) {
                                                A[i][j] = A[i][k] + A[k][j];
                                                N[i][j] = k;
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                        }




                }

            }

        }

        return A;

}


public static int minimum(int i, int j) {

        if (i > j) {

                return j;

        }

        return i;

}


public static void Printing(int[][] Matrix) {

        System.print("\n\t");

        for (int j = 0; j < N; j++) {

                System.print(j + "\t");

        }

        System.println();

        for (int j = 0; j < 35; j++) {

                System.print("-");

        }

        System.println();

        for (int i = 0; i < N; i++) {

                System.print(i + " |\t");

                for (int j = 0; j < N; j++) {
```

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                System.out.print(Matrix[i][j]);

                System.out.print("\t");

        }

        System.out.println("\n");

    }

    System.out.println("\n");

    }


}
```