```java
import java.util.Scanner;

class floyds
{
    public static void main(String args[])
    {
        Scanner sc =new Scanner(System.in);
        System.out.println("Enter the number of vetices");
        int n=sc.nextInt();
        int adj[][]=new int[20][20];
        System.out.println("Enter the elements of the Adjacency Matrix");
        for(int i=1;i<=n;i++)
        {
            for(int j=1;j<=n;j++)
            {
                adj[i][j]=sc.nextInt();
            }
        }


    flyd(adj,n);
        System.out.println("The shortest path is");
        for(int i=1;i<=n;i++)
        {
            for(int j=1;j<=n;j++)
            {
                System.out.print(adj[i][j]+" ");
            }
        System.out.println();
        }
    }
static int flyd(int adj[][],int n)
{
```

```
    for(int k=1;k<=n;k++)

  {

    for(int i=1;i<=n;i++)

    {

      for(int j=1;j<=n;j++)

      {

        adj[i][j]=min(adj[i][j],(adj[i][k]+adj[k][j]));

      }

    }

  }

    return 0;


}
static int min(int a,int b)

{

  if(a<b){

    return a;

  }

  return b;

}}
```