**import** java.util.Scanner;

**public** **class** Floyd {

**public** **static** **void** main(String args[])

{

**int** a[][]=**new** **int**[10][10];

**int** i,j;

Scanner in=**new** Scanner(System.***in***);

System.***out***.println("Enter the number of vertices");

**int** n=in.nextInt();

System.***out***.println("Enter the ajacency matrix");

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

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

a[i][j]=in.nextInt();

System.***out***.println("Entered adjacency matrix is");

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

{

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

{

System.***out***.print(a[i][j]+"\t");;

}

System.***out***.println();

}

*floydalgo*(a,n);

System.***out***.println("All pair shortest path matrix");

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

{

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

System.***out***.print(a[i][j]+"\t");

System.***out***.println();

}

}

**static** **void** floydalgo(**int** a[][], **int** n)

{

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

{

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

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

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

}

}

**static** **int** min(**int** a, **int** b)

{

**if**(a<b)

**return** a;

**return** b;

}

}