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1  #include<stdio.h>
2  void floyd(int p[10][10],int n) {
3  int i,j,k;
4  for (k=1;k<=n;k++)
5  for (i=1;i<=n;i++)
6  for (j=1;j<=n;j++)
7  if(p[i][k] + p[k][j] < p[i][j])
8  p[i][j]=p[i][k] + p[k][j];
9  }
10 void main() {
11 int p[10][10], n, i,j;
12 printf("\n Enter the number of vertices:");
13 scanf("%d",&n);
14 printf("\n Enter the Adj matrix:");
15 for (i=1;i<=n;i++) {
16 for (j=1;j<=n;j++){
17 scanf("%d",&p[i][j]);
18 }
19 }
20 printf("\n Matrix of input data: \n");
21 for (i=1;i<=n;i++) {
22 for (j=1;j<=n;j++)
23 printf("%d\t",p[i][j]);
24 printf("\n");
25 }
26 floyd(p,n);
27 printf("\n Transitive closure: \n");
28 for (i=1;i<=n;i++) {
29 for (j=1;j<=n;j++)
30 printf("%d\t",p[i][j]);
31 printf("\n");
32 }
33 }
34

```