output:

```
 Enter the number of vertices:5

 Enter the number of edges:
5

 Enter the end vertices of edge1 with its weight
1
2
20

 Enter the end vertices of edge2 with its weight
3
4
40

 Enter the end vertices of edge3 with its weight
2
3
15

 Enter the end vertices of edge4 with its weight
4
5
80
```

```
 Enter the end vertices of edge5 with its weight
1
3
10

 Matrix of input data:
999     20      10      999     999
999     999     15      999     999
999     999     999     40      999
999     999     999     999     80
999     999     999     999     999

 Transitive closure:
0       20      10      50      130
999     0       15      55      135
999     999     0       40      120
999     999     999     0       80
999     999     999     999     0
```

```
The shortest paths are:

<1,2>=20
<1,3>=10
<1,4>=50
<1,5>=130
<2,1>=999
<2,3>=15
<2,4>=55
<2,5>=135
<3,1>=999
<3,2>=999
<3,4>=40
<3,5>=120
<4,1>=999
<4,2>=999
<4,3>=999
<4,5>=80
<5,1>=999
<5,2>=999
<5,3>=999
<5,4>=999
```