

```

8 #include<stdio.h>
9 #include<conio.h>
10 int a,b,u,v,n,i,j,ne=1;
11 int visited[10]={0},min,mincost=0,cost[10][10];
12 void main(){
13     printf("\n Enter the number of nodes:");
14     scanf("%d",&n);
15     printf("\n Enter the adjacency matrix:\n");
16     for (i=1;i<=n;i++)
17         for (j=1;j<=n;j++){
18             scanf("%d",&cost[i][j]);
19             if(cost[i][j]==0)
20                 cost[i][j]=999;
21         }
22     visited[1]=1;
23     printf("\n");
24     while(ne<n) {
25         for (i=1,min=999;i<=n;i++)
26             for (j=1;j<=n;j++)
27                 if(cost[i][j]<min)
28                     if(visited[i]!=0) {
29                         min=cost[i][j];
30                         a=u=i;
31                         b=v=j;
32                     }
33         if(visited[u]==0 || visited[v]==0) {
34             printf("\n Edge %d:(%d %d) cost:%d",ne++,a,b,min);
35             mincost+=min;
36             visited[b]=1;

```

```

14 scanf( %d ,&n);
15 printf("\n Enter the adjacency matrix:\n");
16 for (i=1;i<=n;i++)
17     for (j=1;j<=n;j++){
18         scanf("%d",&cost[i][j]);
19         if(cost[i][j]==0)
20             cost[i][j]=999;
21     }
22 visited[1]=1;
23 printf("\n");
24 while(ne<n) {
25     for (i=1,min=999;i<=n;i++)
26         for (j=1;j<=n;j++)
27             if(cost[i][j]<min)
28                 if(visited[i]!=0) {
29                     min=cost[i][j];
30                     a=u=i;
31                     b=v=j;
32                 }
33     if(visited[u]==0 || visited[v]==0) {
34         printf("\n Edge %d:(%d %d) cost:%d",ne++,a,b,min);
35         mincost+=min;
36         visited[b]=1;
37     }
38     cost[a][b]=cost[b][a]=999;
39 }
40 printf("\n Minimum cost=%d",mincost);
41 getch();
42 }
43

```

Enter the number of nodes:5

Enter the adjacency matrix:

```
0 2 0 8 1
5 0 0 0 9
6 4 7 0 0
9 0 1 3 0
0 0 2 0 8
```

Edge 1: (1 5) cost:1

Edge 2: (1 2) cost:2

Edge 3: (5 3) cost:2

Edge 4: (1 4) cost:8

Minimum cost=13

...Program finished with exit code 0

Press ENTER to exit console.