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9  #include<stdio.h>
10 #include<conio.h>
11 void kruskals();
12 int c[10][10],n;
13 void main(){
14     int i,j;
15     printf("\nEnter the no. of vertices:\n");
16     scanf("%d",&n);
17     printf("\nEnter the cost matrix:\n");
18     for(i=1;i<=n;i++){
19         for(j=1;j<=n;j++){
20             scanf("%d",&c[i][j]);
21         }
22     }
23     kruskals();
24     getch();
25 }
26 void kruskals(){
27     int i,j,u,v,a,b,min;
28     int ne=0,mincost=0;
29     int parent[10];
30     for(i=1;i<=n;i++){
31         parent[i]=0;
32     }
33     while(ne!=n-1){
34         min=9999;
35         for(i=1;i<=n;i++){
36             for(j=1;j<=n;j++){
37                 if(c[i][j]<min){

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32 }
33 while(ne!=n-1){
34     min=9999;
35     for(i=1;i<=n;i++){
36         for(j=1;j<=n;j++){
37             if(c[i][j]<min){
38                 min=c[i][j];
39                 u=a=i;
40                 v=b=j;
41             }
42         }
43     }
44     while(parent[u]!=0){
45         u=parent[u];
46     }
47     while(parent[v]!=0){
48         v=parent[v];
49     }
50     if(u!=v){
51         printf("\n%d----->%d=%d\n",a,b,min);
52         parent[v]=u;
53         ne=ne+1;
54         mincost=mincost+min;
55     }
56     c[a][b]=c[b][a]=999;
57 }
58 printf("\nMinimun cost=%d",mincost);
59 }
60
61

```



```
input
Enter the no. of vertices:
4
Enter the cost matrix:
999 999 4 999
2 8 999 999
1 999 6 999
999 999 3 9

3----->1=1
2----->1=2
4----->3=3

Minimun cost=6

...Program finished with exit code 0
Press ENTER to exit console.
```