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1  #include<stdio.h>
2  int visited[10]=0;
3  int prim(int cost[10][10], int n);
4  int main()
5  {
6  int cost[10][10], n, source, res;
7  printf("Enter number of nodes ");
8  scanf("%d",&n);
9  printf("Enter cost in form of adjacency matrix\n");
10 for(int i=0;i<n;i++)
11 for(int j=0;j<n;j++)
12 scanf("%d",&cost[i][j]);
13 res=prim(cost, n);
14 printf("\nminimum weight is %d", res);
15 return 0;
16 }
17 int prim(int cost[10][10], int n)
18 {
19 int min, min_cost=0, count=0, a, b;
20 visited[0]=1;
21 while(count<n-1)
22 {
23 min=999;
24 for(int i=0;i<n;i++)
25 {
26 for(int j=0;j<n;j++)
27 {
28 if(cost[i][j]<min && visited[i]==1)
29 {
30 min=cost[i][j];
31 a=i;
32 b=j;
33 }
34 }
35 }
36 if(visited[b]==0)
37 {
38 printf("\n%d to %d cost=%d",a,b,min);
39 min_cost=min_cost+min;
40 count++;
41 }
42 visited[b]=1;
43 cost[a][b]=cost[b][a]=999;
44 }
45 return min_cost;
46 }
47

```