Prim’s Algorithm

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#include<stdio.h>
#include<conio.h>
int a,b,u,v,n,i,j,ne=1;
int visited[10]={0},min,mincost=0,cost[10][10];
void main()
{
 clrscr();
 printf("n Enter the number of nodes:");
 scanf("%d",&n);
 printf("n Enter the adjacency matrix:n");
 for(i=1;i<=n;i++)
  for(j=1;j<=n;j++)
  {
   scanf("%d",&cost[i][j]);
   if(cost[i][j]==0)
    cost[i][j]=999;
  }
 visited[1]=1;
 printf("n");
 while(ne<n)
 {
  for(i=1,min=999;i<=n;i++)
   for(j=1;j<=n;j++)
    if(cost[i][j]<min)
     if(visited[i]!=0)
     {
      min=cost[i][j];
      a=u=i;
      b=v=j;
     }
  if(visited[u]==0 || visited[v]==0)
  {
   printf("n Edge %d:(%d %d) cost:%d",ne++,a,b,min);
   mincost+=min;
   visited[b]=1;
  }
```

```
 cost[a][b]=cost[b][a]=999;
 }
 printf("n Minimun cost=%d",mincost);
 getch();
}
```