**Prim’s Algorithm**

#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();  
}