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| 24) | Implementation of Minimum Spanning Tree using Prim’s Algorithm  #include<stdio.h>  int a,b,u,v,n,i,j,ne=1;  int visited[10]={0},min,mincost=0,cost[10][10];  int main() {  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);  return 0;  } |