main.c

```c
#include<stdio.h>
#include<stdlib.h>
void prims();
int c[10][10],n;
int main()
{
 int i,j;
 printf("\nenter the no. of vertices:\t");
 scanf("%d",&n);
 printf("\nenter the cost matrix:\n");
 for(i=1;i<=n;i++)
 {
  for(j=1;j<=n;j++)
  {
   scanf("%d",&c[i][j]);
  }
 }
 prims();
}

void prims()
{
 int i,j,u,v,min;
 int ne=0,mincost=0;
 int elec[10];
 for(i=1;i<=n;i++)
 {
  elec[i]=0;
 }
 elec[1]=1;
 while(ne!=n-1)
 {
  min=9999;
  for(i=1;i<=n;i++)
```

main.c

```
35  {
36   for(j=1;j<=n;j++)
37   {
38    if(elec[i]==1)
39    {
40     if(c[i][j]<min)
41     {
42      min=c[i][j];
43      u=i;
44      v=j;
45     }
46    }
47   }
48  }
49  if(elec[v]!=1)
50  {
51   printf("\n%d----->%d=%d\n",u,v,min);
52   elec[v]=1;
53   ne=ne+1;
54   mincost=mincost+min;
55  }
56  c[u][v]=c[v][u]=9999;
57 }
58 printf("\nmincost=%d",mincost);
59 }
```

Console Shell