2)Prims

```
#include<stdio.h>
void prims();
int c[10][10],n;
void main()
{
   int i,j;
   printf("\n enter the number of vertices:\t");
   scanf("%d",&n);
   printf("\n enter 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++)
  {
    for(j=1;j<=n;j++)
    {
      if(elec[i]==1)
      {
        if(c[i][j]<min)
        {
          min=c[i][j];
          u=i;
          v=j;
        }
      }
    }
  }
  if(elec[v]!=1)
  {
    printf("\n %d--->%d=%d\n",u,v,min);
    elec[v]=1;
    ne=ne+1;
    mincost=mincost+min;
  }
  c[u][v]=c[v][u]=9999;
```

```
    }
    printf("\n mincost=%d",mincost);
}
```