



```
1139         b=t=j;
1140     }
1141 }
1142 }
1143 }
1144 if (v[u]==0 || v[t]==0) {
1145     printf("\nEdge %d: (%d %d) cost:%d",c++,a,b,m);
1146     min+=m;
1147     v[b]=1;
1148 }
1149 cost[a][b]=cost[b][a]=999;
1150 }
1151 printf("\nMinimun cost=%d\n",min);
1152 return 0;
1153 }
1154
1155
```

Enter the number of vertices :- 3

Enter the adjacency matrix:

0 2 5

2 0 0

5 0 0

Edge 1:(1 2) cost:2

Edge 2:(1 3) cost:5

Minimun cost=7

Process returned 0 (0x0) execution time : 21.159 s

Press any key to continue.

```
1158 //Kruskal
1159 #include<stdio.h>
1160 #include<stdlib.h>
1161 int i,j,k,a,b,u,v,n,ne=1;
1162 int min,mincost=0,cost[10][10],parent[10];
1163 int main()
1164 {
1165     printf("Enter the no. of vertices :- ");
1166     scanf("%d",&n);
1167     printf("\nEnter the adjacency matrix :\n");
1168     for(i=1;i<=n;i++){
1169         for(j=1;j<=n;j++){
1170             scanf("%d",&cost[i][j]);
1171             if(cost[i][j]==0)
1172                 cost[i][j]=999;
1173         }
1174     }
1175     while(ne < n){
1176         for(i=1,min=999;i<=n;i++){
1177             for(j=1;j <= n;j++){
1178                 if(cost[i][j] < min){
1179                     min=cost[i][j];
1180                     a=u=i;
1181                     b=v=j;
1182                 }
1183             }
1184         }
1185         while(parent[u])
1186             u=parent[u];
```

```
1185     while (parent[u])
1186         u=parent[u];
1187     while (parent[v])
1188         v=parent[v];
1189     if (u!=v) {
1190         printf("Edge %d:%d,%d) Cost:%d\n",ne++,a,b,min);
1191         mincost+=min;
1192         parent[v]=u;
1193     }
1194     cost[a][b]=cost[b][a]=999;
1195 }
1196 printf("\nMinimum cost = %d\n",mincost);
1197 return 0;
1198 }
1199
1200
1201
1202
1203
```

Enter the no. of vertices :- 6

Enter the adjacency matrix :

0 3 1 6 0 0

3 0 5 0 3 0

1 5 0 5 6 4

6 0 5 0 0 2

0 3 6 0 0 6

0 0 4 2 6 0

Edge 1:(1,3) Cost:1

Edge 2:(4,6) Cost:2

Edge 3:(1,2) Cost:3

Edge 4:(2,5) Cost:3

Edge 5:(3,6) Cost:4

Minimum cost = 13

Process returned 0 (0x0) execution time : 48.654 s

Press any key to continue.