34. Implementation of Minimum Spanning Tree using Prim's Algorithm.

```
#include <stdio.h>
int g[5][5]={{0,2,0,6,0},{2,0,3,8,5},{0,3,0,0,7},{6,8,0,0,9},{0,5,7,9,0}};
int main() {
   int s[5]={0}, key[5], p[5], i, j, u;
   for(i=0;i<5;i++) key[i]=INF;
   key[0]=0;p[0]=-1;
   for(i=0;i<5-1;i++){
      int min=INF;
      for(j=0;j<5;j++)
         if(!s[j] && key[j]<min){min=key[j];u=j;}
      s[u]=1;
      for(j=0;j<5;j++)
         if(g[u][j] && !s[j] && g[u][j]<key[j]){p[j]=u; key[j]=g[u][j];}
   }
   for(i=1;i<5;i++) printf("%d - %d\n", p[i], i);
   return 0;
}
```

OUTPUT