```cpp
1   #include <cstdio>
2   #include <cstring>
3   using namespace std;
4   const unsigned int maxn=128,NOEDGE=~0;
5   unsigned int G[maxn][maxn];
6   int N,M;
7   int res;
8   template <class T>
9   void update(T& o,const T& x){
10      if(o>x)
11          o=x;
12  }
13  bool vis[maxn];
14  void dfs(int v){
15      vis[v]=true;
16      for(int i=2;i<=N;++i)
17          if((!vis[i])&&G[v][i]!=NOEDGE)
18              dfs(i);
19  }
20  bool possible(){
21      memset(vis,0,sizeof(vis));
22      dfs(1);
23      for(int i=2;i<=N;++i)
24          if(!vis[i])
25              return false;
26      return true;
27  }
28  int pre[maxn];
29  bool del[maxn];
30  void solve(){
31      int num=N;
32      memset(del,0,sizeof(del));
33      for(;;){
34          int i;
35          for(i=2;i<=N;++i){
36              if(del[i])continue;
37              pre[i]=i;
38              G[i][i]=NOEDGE;
39              for(int j=1;j<=N;++j){
40                  if(del[j])continue;
41                  if(G[j][i]<G[pre[i]][i])
42                      pre[i]=j;
43              }
44          }
45          for(i=2;i<=N;++i){
46              if(del[i])continue;
47              int j=i;
48              memset(vis,0,sizeof(vis));
49              while(!vis[j]&&j!=1){
50                  vis[j]=true;
51                  j=pre[j];
52              }
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53              if(j==1)continue;
54              i=j;
55              res+=G[pre[i]][i];
56              for(j=pre[i];j!=i;j=pre[j]){
57                  res+=G[pre[j]][j];
58                  del[j]=true;
59              }
60              for(j=1;j<=N;++j){
61                  if(del[j])continue;
62                  if(G[j][i]!=NOEDGE)
63                      G[j][i]-=G[pre[i]][i];
64              }
65              for(j=pre[i];j!=i;j=pre[j]){
66                  for(int k=1;k<=N;++k){
67                      if(del[k])continue;
68                      update(G[i][k],G[j][k]);
69                      if(G[k][j]!=NOEDGE)
70                          update(G[k][i],G[k][j]-G[pre[j]][j]);
71                  }
72              }
73              for(j=pre[i];j!=i;j=pre[j]){
74                  del[j]=true;
75              }
76              break;
77          }
78          if(i>N){
79              for(int i=2;i<=N;++i){
80                  if(del[i])continue;
81                  res+=G[pre[i]][i];
82              }
83              break;
84          }
85      }
86  }
```