#include<iostream>

#include<cstring>

using namespace std;

#define MIN 999999

int main(){

int v;

cout<<"Enter the no of connections required"<<"\n";

cin>>v;

int G[v][v];

for(int i=0;i<v;i++){

for(int j=0;j<v;j++){

cout<<"enter the cost for connection form"<<"G["<<i<<"]"<<"G["<<j<<"]"<<"\n";

cin>>G[i][j];

}

}

int v\_array[v];

memset(v\_array,false,sizeof(v\_array));

v\_array[0]=true;

int n\_edges=0;

cout<<"Edges:Weight"<<" ";

while(n\_edges<v-1){

int total=0;

int min=MIN;

int r=0,c=0;

for(int i=0;i<v;i++){

if(v\_array[i]){

for(int j=0;j<v;j++){

if(min>G[i][j]){

if(!v\_array[j]&&G[i][j]){

min=G[i][j];

r=i;

c=j;

}

}

}

}

}

cout<<r<<" "<<c<<" "<<G[r][c]<<" ";

cout<<endl;

v\_array[c]=true;

n\_edges++;

total=total+min;

cout<<total;

}

}