

```
#include <iostream>

#include <algorithm>

using namespace std;

const int MAX = 100;

struct Edge {
    int u, v, weight;
};

Edge edges[MAX];
int parent[MAX];

int find(int i) {
    if (parent[i] == i) return i;
    return parent[i] = find(parent[i]);
}

void unionSet(int a, int b) {
    parent[find(a)] = find(b);
}

bool compare(Edge a, Edge b) {
    return a.weight < b.weight;
}
```

```
int main() {  
  
    int n, e;  
  
    cout << "Enter number of vertices and edges: ";  
  
    cin >> n >> e;  
  
  
    cout << "Enter edges (u v weight):\n";  
  
    for (int i = 0; i < e; i++)  
        cin >> edges[i].u >> edges[i].v >> edges[i].weight;  
  
  
    // Initialize disjoint set  
    for (int i = 0; i < n; i++) parent[i] = i;  
  
  
    sort(edges, edges + e, compare);  
  
  
    int cost = 0;  
  
    cout << "Edges in MST:\n";  
  
    for (int i = 0; i < e; i++) {  
        int u = edges[i].u;  
        int v = edges[i].v;  
        if (find(u) != find(v)) {  
            cout << u << " - " << v << " : " << edges[i].weight << "\n";  
            cost += edges[i].weight;  
            unionSet(u, v);  
        }  
    }  
}
```

```
cout << "Total cost of MST: " << cost << endl;  
return 0;  
}
```