Output Screenshot:-> Consider A-0, B-1, C-2, D-3, E-4, F-5, G-6, H-8, I-9, J-7, K-11,L-10

```
sanyam@SANYAM: ~/DAA
sanyam@SANYAM:~/DAA$ gcc kruskal.c -o out1
sanyam@SANYAM:~/DAA$ ./out1
Edges in the Minimum Spanning Tree:
(1, 2) with weight 1
(9, 7) with weight 1
(1, 4) with weight 2
(2, 3) with weight 2
(2, 6) with weight 2
(6, 9) with weight 2
(10, 11) with weight 3
(4, 5) with weight 4
(0, 1) with weight 6
(7, 10) with weight 8
(5, 8) with weight 10
Total Cost of Minimum Spanning Tree: 41
sanyam@SANYAM:~/DAA$
```

Time Complexity:

The time complexity of Kruskal's algorithm using the Union-Find algorithm for finding the cycle and sorting the edges is **O(E log E + E log V)**, where E is the number of edges and V is the number of vertices in the graph.