

Reverse Delete to find Minimum Spanning Tree

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1) Example 1:

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Number of vertices: 9
Number of edges: 14
Graph with 14 Edges 9 Vertices
Enter vertex pairs with edge in between : Eg. (0 1 w) -> Edge between V0 and V1 with weight w
Edge 1 :0 1 4
Edge 2
       :0 7 8
Edge 3
       :1 7 11
Edge 4 :1 2 8
Edge 5 :2 8 2
Edge 6 :7 8 7
Edge 7
       :8 6 6
Edge 8
       :7 6 1
Edge 9 :2 5 4
Edge 10 :6 5 2
Edge 11 :2 3 7
Edge 12 :3 5 14
Edge 13
        :3 4 9
Edge 14
        :5 4 10
Edge (3 , 4) included in MST
Edge (1 , 2) included in MST
Edge (2 , 3) included in MST
Edge (0 , 1) included in MST
Edge (2 , 5) included in MST
Edge (2 , 8) included in MST
Edge (6 , 5) included in MST
Edge (7, 6) included in MST
Weight of MST is 37
PS C:\Users\sansk\Desktop\Sanskriti\College\GraphTheory\ReverseDelete>
```

2) Example 2

```
Number of vertices: 5
Number of edges: 7
Graph with 7 Edges 5 Vertices
Enter vertex pairs with edge in between : Eg. (0 1 w) -> Edge between V0 and V1 with weight w
Edge 1 :0 1 8
Edge 2 :0 2 5
Edge 3 :1 2 9
Edge 4 :1 3 11
Edge 5 :2 3 15
Edge 6 :2 4 10
Edge 7 :3 4 7
Edge (2 , 4) included in MST
Edge (0 , 1) included in MST
Edge (3 , 4) included in MST
Edge (0 , 2) included in MST
Edge (0 , 2) included in MST
```

3) Example 3

```
Number of vertices: 5
Number of edges: 6
Graph with 6 Edges 5 Vertices
Enter vertex pairs with edge in between : Eg. (0 1 w) -> Edge between V0 and V1 with weight w
Edge 1 :0 1 3
Edge 2 :1 2 9
Edge 3 :2 3 8
Edge 4 :0 3 4
Edge 5 :0 4 13
Edge 6 :4 2 2
Edge (2 , 3) included in MST
Edge (0 , 1) included in MST
Edge (0 , 1) included in MST
Edge (4 , 2) included in MST
Edge (4 , 2) included in MST
```

4) Example 4

```
Number of vertices: 7
Number of edges: 9
Graph with 9 Edges 7 Vertices
Enter vertex pairs with edge in between : Eg. (0 1 w) -> Edge between V0 and V1 with weight w
Edge 1 :0 1 1
Edge 2 :0 4 2
Edge 3 :1 4 3
Edge 4 :1 2 4
Edge 5 :5 6 5
Edge 6 :2 6 6
Edge 7
         :1 5 7
Edge 8 :2 3 8
Edge 9 :3 6 9
Edge (2 , 3) included in MST
Edge (2 , 6) included in MST
Edge (5 , 6) included in MST
Edge (1 , 2) included in MST
Edge (0 , 4) included in MST
Edge (0 , 1) included in MST
Weight of MST is 26
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5) Example 5

```
Number of vertices: 5
Number of edges: 5
Graph with 5 Edges 5 Vertices
Enter vertex pairs with edge in between : Eg. (0 1 w) -> Edge between V0 and V1 with weight w
Edge 1 :0 3 6
Edge 2 :0 2 9
Edge 3 :2 3 4
Edge 4 :3 1 26
Edge 5 :3 4 20
Edge (3 , 1) included in MST
Edge (3 , 4) included in MST
Edge (0 , 3) included in MST
Edge (2 , 3) included in MST
Edge (2 , 3) included in MST
```

```
No. of vertices :7
No. of edges :8
Edge 1 :0 1
Edge 2 :0 2
Edge 3 :1 2
Edge 4 :1 6
Edge 5 :1 3
Edge 6 :1 4
Edge 7 :3 5
Edge 8 :4 5

Articulation points are :
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