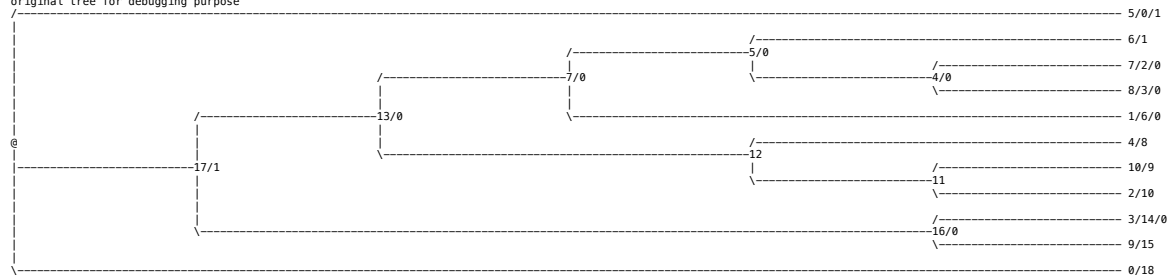
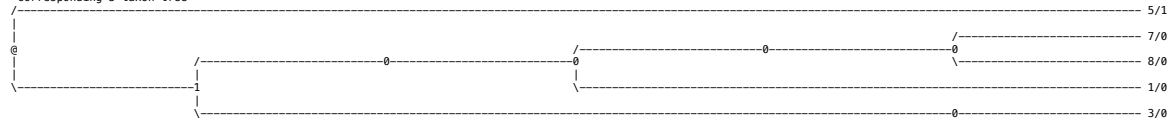


***** Model Condition -model.10.5400000.0.00000037/ Replicate -1/ *****
 quintet ['1', '3', '5', '7', '8']
 original tree for debugging purpose



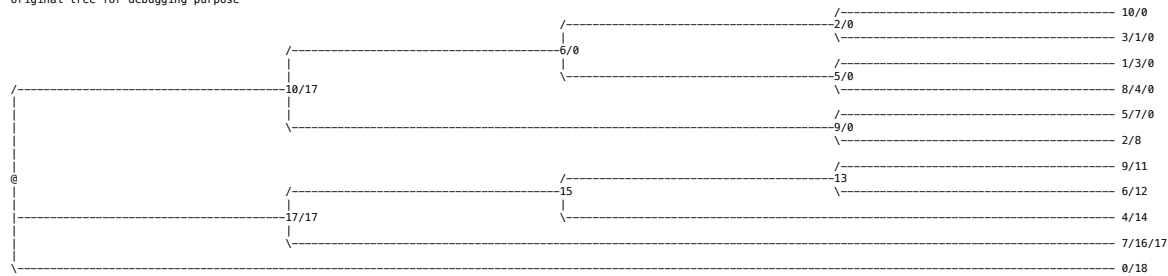
Corresponding 5-taxon tree



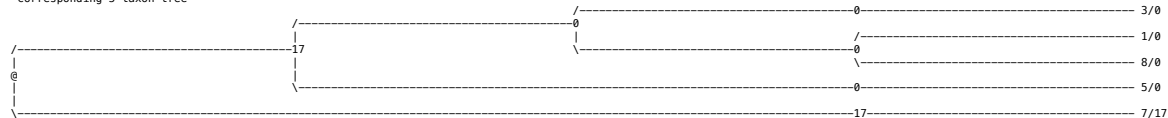
U = [955, 23, 22, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0]

Analysis:-
 1) best score on the dataset - 0
 2) # edges that have the best score - 9

***** Model Condition -model.10.5400000.0.00000037/ Replicate -2/ *****
 quintet ['1', '3', '5', '7', '8']
 original tree for debugging purpose



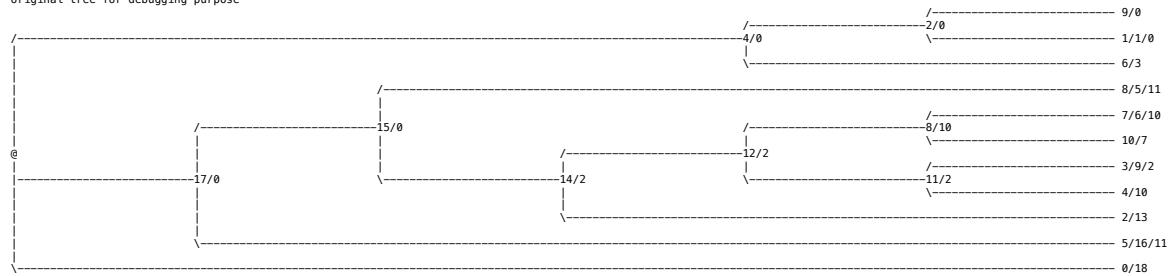
Corresponding 5-taxon tree



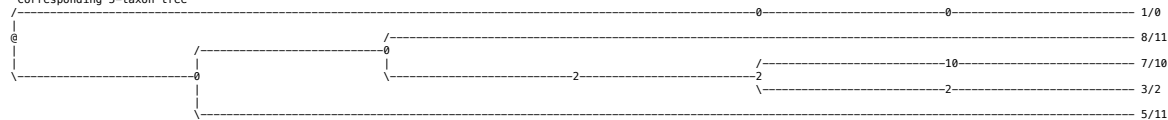
U = [409, 304, 287, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0]

Analysis:-
 1) best score on the dataset - 0
 2) # edges that have the best score - 8

***** Model Condition -model.10.5400000.0.00000037/ Replicate -3/ *****
 quintet ['1', '3', '5', '7', '8']
 original tree for debugging purpose



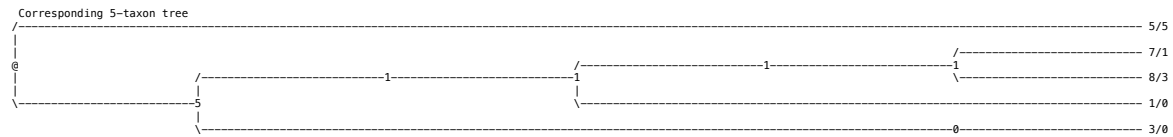
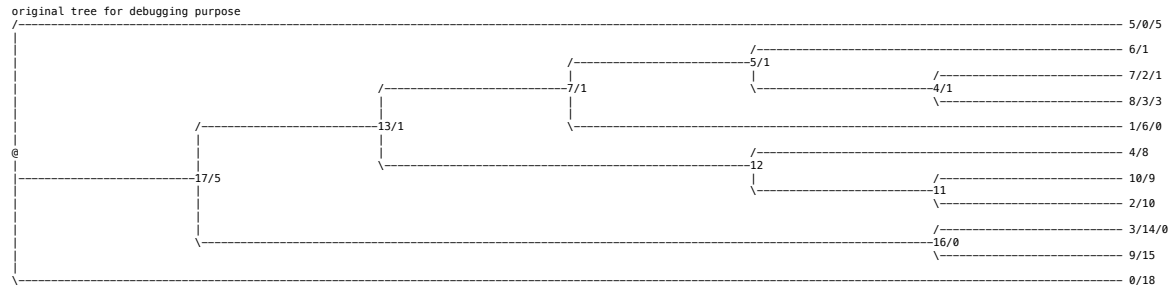
Corresponding 5-taxon tree



U = [799, 83, 92, 14, 0, 2, 0, 0, 2, 0, 0, 2, 6, 0, 0]

Analysis:-
 1) best score on the dataset - 0
 2) # edges that have the best score - 6

***** Model Condition -model.10.1800000.0.000000111/ Replicate -1/ *****
 quintet ['1', '3', '5', '7', '8']

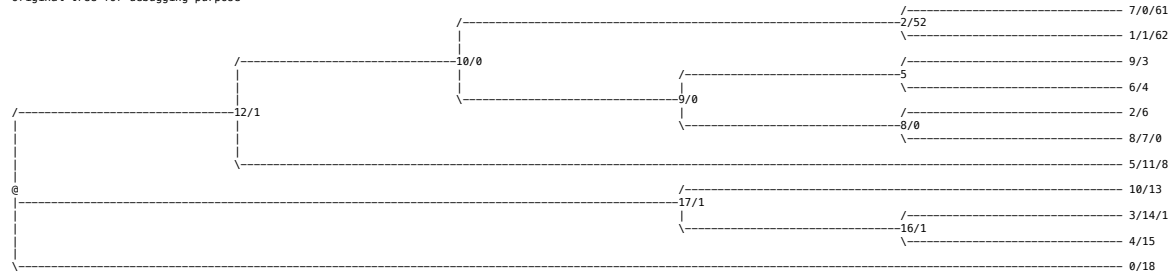


U = [681, 155, 153, 2, 3, 1, 0, 0, 1, 0, 0, 0, 4, 0, 0]

Analysis:-

- 1) best score on the dataset - 0
- 2) # edges that have the best score - 3

***** Model Condition -model.10.1800000.0.000000111/ Replicate -2/ *****
 quintet ['1', '3', '5', '7', '8']

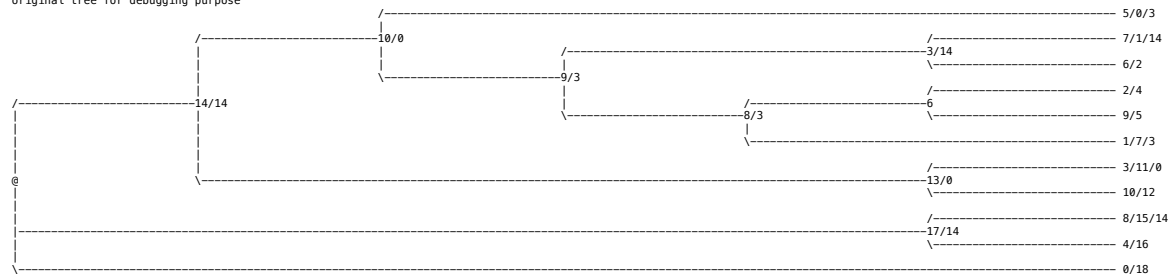


U = [302, 93, 92, 131, 55, 63, 1, 3, 59, 2, 4, 45, 136, 7, 7]

Analysis:-

- 1) best score on the dataset - 0
- 2) # edges that have the best score - 4

***** Model Condition -model.10.1800000.0.000000111/ Replicate -3/ *****
 quintet ['1', '3', '5', '7', '8']



U = [711, 39, 27, 102, 10, 8, 0, 0, 3, 0, 0, 4, 96, 0, 0]

Analysis:-

- 1) best score on the dataset - 0
- 2) # edges that have the best score - 3

***** Model Condition -model.10.600000.0.000000333/ Replicate -1/ *****

Original tree for debugging purpose

```
graph LR; Root --- Node13_0[13/0]; Root --- Node17_1[17/1]; Node13_0 --- Node7_0[7/0]; Node13_0 --- Node5_19[5/19]; Node7_0 --- Node7_2_26[7/2/26]; Node7_0 --- Node8_3_32[8/3/32]; Node5_19 --- Node1_6_3[1/6/3]; Node5_19 --- Node4_8[4/8]; Node17_1 --- Node12[12]; Node17_1 --- Node11[11]; Node12 --- Node10_9[10/9]; Node12 --- Node2_10[2/10]; Node11 --- Node3_14_12[3/14/12]; Node11 --- Node9_15[9/15]; Node11 --- Node0_18[0/18];
```

U = [362, 203, 202, 28, 24, 32, 10, 12, 28, 6, 10, 29, 38, 7, 9]

- 1) best score on the dataset - 0
- 2) # edges that have the best score - 2

The diagram illustrates the recursive construction of a sequence of numbers. The root node is 14/0. It branches into 11/0 and 13/0. 11/0 branches into 10/21 and 9/21. 10/21 branches into 7/44 and 7/8/21. 9/21 branches into 7/8/21 and 10/12. 13/0 branches into 17/0 and 1/16/0. 17/0 branches into 0/18. The diagram uses dashed lines and arrows to show the flow of the construction.

```

graph TD
    14_0["14/0"] --> 11_0["11/0"]
    14_0 --> 13_0["13/0"]
    11_0 --> 10_21["10/21"]
    11_0 --> 9_21["9/21"]
    10_21 --> 7_44["7/44"]
    10_21 --> 7_8_21["7/8/21"]
    9_21 --> 7_8_21
    9_21 --> 10_12["10/12"]
    13_0 --> 17_0["17/0"]
    13_0 --> 1_16_0["1/16/0"]
    17_0 --> 0_18["0/18"]
  
```

U = [470, 70, 85, 129, 28, 31, 0, 4, 26, 5, 1, 32, 111, 3, 5]

- 1) best score on the dataset - 0
- 2) # edges that have the best score - 5

1/0/19

5/1/18

2/3

8/4/21

4/5

3/6/20

9/11

10/12

6/13

7/15/6

0/18

10/6

9/12

8/12

7/20

17/6

16/6

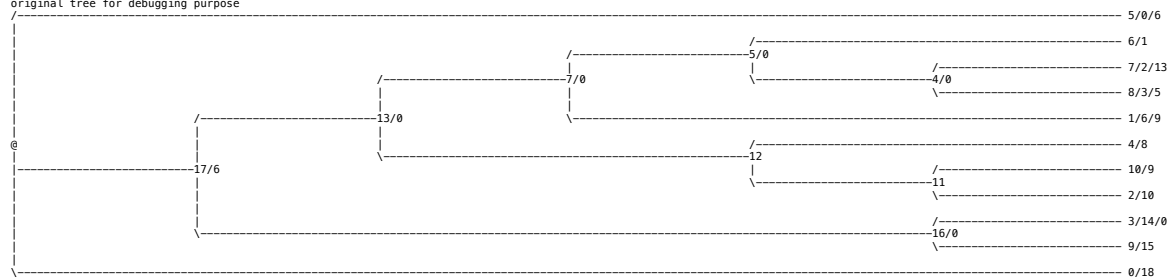
14

U = [94, 86, 145, 51, 47, 80, 51, 41, 71, 64, 39, 60, 54, 41, 76]

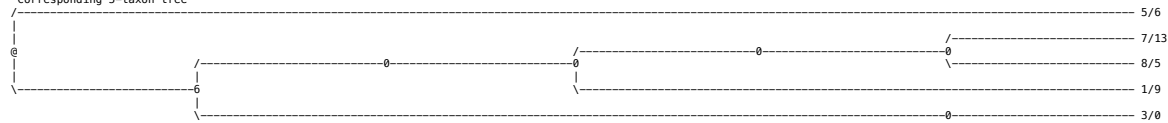
Analysis:-

- 1) best score on the dataset - 6
- 2) # edges that have the best score - 5

***** Model Condition -model.10.200000.0.000001000/ Replicate -1/ *****
 quintet ['1', '3', '5', '7', '8']
 original tree for debugging purpose



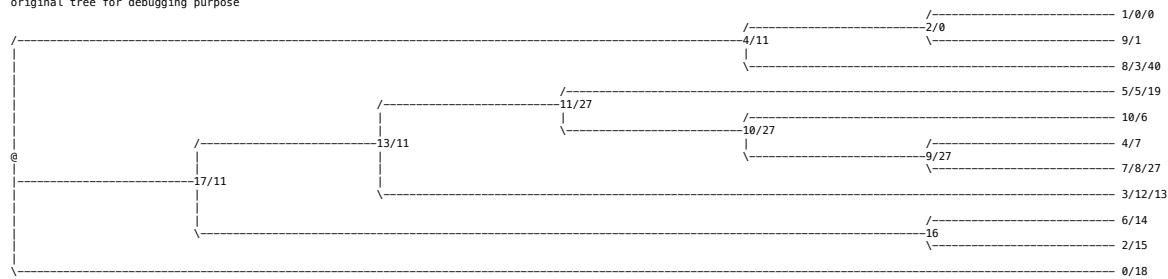
Corresponding 5-taxon tree



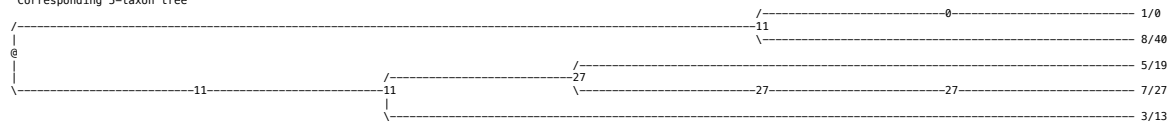
U = [182, 167, 161, 57, 43, 43, 30, 24, 43, 39, 48, 40, 48, 31, 44]

Analysis:-
 1) best score on the dataset - 0
 2) # edges that have the best score - 5

***** Model Condition -model.10.200000.0.000001000/ Replicate -2/ *****
 quintet ['1', '3', '5', '7', '8']
 original tree for debugging purpose



Corresponding 5-taxon tree



U = [152, 92, 91, 74, 85, 57, 41, 29, 72, 50, 37, 68, 67, 40, 45]

Analysis:-
 1) best score on the dataset - 0
 2) # edges that have the best score - 0