

## Code Output - OCdt Michael Jiang

----- Question 1 -----

t->preOrder() outputs  
t->postOrder() outputs  
t->inOrder() outputs  
t->search(4) outputs  
t->printTree() outputs []  
t->height() outputs -1  
t->remove(4) outputs

----- Question 2 -----

t->preOrder() outputs 10,  
t->postOrder() outputs 10,  
t->inOrder() outputs 10,  
t->search(4) outputs  
t->search(5) outputs  
t->search(10) outputs Data10  
t->printTree() outputs [(10,Data10)]  
t->height() outputs 0  
t->remove(10) outputs Data10

----- Question 3 -----

t->preOrder() outputs 10, 6, 3, 2, 15, 13, 16,  
t->postOrder() outputs 2, 3, 6, 13, 16, 15, 10,  
t->inOrder() outputs 2, 3, 6, 10, 13, 15, 16,

t->search(13) outputs Data13

t->search(100) outputs

t->search(5) outputs

t->printTree() outputs [(2,Data2), (3,Data3), (6,Data6), (10,Data10),  
(13,Data13), (15,Data15), (16,Data16)]

t->height() outputs 3

----- Question 4 -----

t->preOrder() outputs 15, 14, 12, 10,

t->postOrder() outputs 10, 12, 14, 15,

t->inOrder() outputs 10, 12, 14, 15,

t->search(13) outputs Data12

t->search(100) outputs Data10

t->search(5) outputs

t->printTree() outputs [(10,Data10), (12,Data12), (14,Data14), (15,Data15)]

t->height() outputs 3

----- Question 5 -----

t->preOrder() outputs 16, 20, 17,

t->postOrder() outputs 17, 20, 16,

t->inOrder() outputs 16, 17, 20,

t->search(15) outputs

t->search(20) outputs Data20

t->printTree() outputs [(16,Data16), (17,Data17), (20,Data20)]

t->height() outputs 2

----- Question 6 -----

t->preOrder() outputs -8, -25, -30, -35, -5, -7, -3, -4, 6,  
t->postOrder() outputs -35, -30, -25, -7, -4, 6, -3, -5, -8,  
t->inOrder() outputs -35, -30, -25, -8, -7, -5, -4, -3, 6,  
t->search(15) outputs  
t->search(20) outputs  
t->printTree() outputs [(-35,Data-35), (-30,Data-30), (-25,Data-25), (-  
8,Data-8), (-7,Data-7), (-5,Data-5), (-4,Data-4),  
(-3,Data-3), (6,Data6)]  
t->height() outputs 3

Process finished with exit code 0