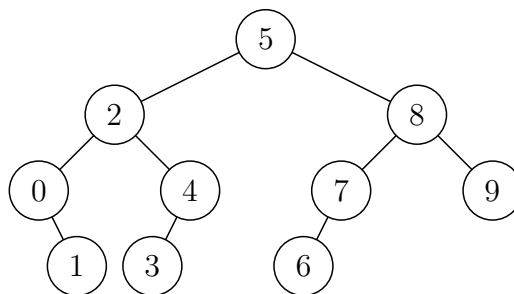


Name: \_\_\_\_\_

1. (1 pt.) Write your name in the space provided above.
2. (3 pts.) Depict (using the usual graphical representation) the binary search tree resulting from the insertion of the following keys, in the order presented:

2, 71, 82, 81, 83, 1, 61, 80, 33, 99

3. (4 pts.) Provide a sequence of keys that produces the following binary search tree when the keys are inserted into an initially empty tree in sequence order.



4. (4 pts.) Depict (using the usual graphical representation, with marked nodes adorned with  $*$ ) the *marked simple digital trie* resulting from the insertion of the following keys, in the order presented:

2, 71, 82, 81, 83, 1, 61, 80, 33, 99

5. (6 pts.) List **all** sequences of keys that produce the following binary search tree when the keys in each sequence are inserted into an initially empty tree in sequence order.

