Q. 1. Construct the **binary search tree**, T, for the following set. Ignore duplicates. Show all your work.

\[ S = \{ b, i, n, a, r, y, s, e, a, r, c, h, t, r, e, e \} \]

After you have constructed the tree, perform the following operations on it. Show all your work, including the resultant trees.

DeleteMax (T)
Delete (b, T)
Final Tree

Delete Man(T)

Delete(b,T) Two Possibilities