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)