**ACTIVITY 7**

**Question :**

Draw the red-black BST that results when you insert letters A to K in order into an initially empty red-black BST. Then, describe what happens in general when red-black BSTs are built by inserting keys in ascending order.

**Solution :**

If the keys to be inserted in the BST are in ascending order then the functions rotateleft(), rotateright(), flipcolour() are necessary to be called many numbers of times. But it does not affect the complexity of Red-Black BST since the complexity of it is O(log N) in any case. The proof is shown below.,



