

**Q1-** Write the steps of the Binary-Search-Tree algorithm for this array [7, 5, 1, 8, 3, 6, 0, 9, 4, 2]

Answer:

The root is five and the 8 is on the right of the root and the 3 is on the left of the root. When we look at the left side of the root, we see that the 4 is located in the right of the 3 and the 1 is located in the left of the 3. Also, on the left side of the 1, there is the 0 and on the right side of the 1, there is the 2. When we look at the right side of the root, firstly we see the 8. On the right side of the 8, the 9 is located. On the left side of the 8, the 6 is there and as a final, there is the 7 on the right side of the 6.