BT2: Given a list of integer numbers: 2, 1, 10, 6, 3, 8, 7, 13, 20.

a) Draw the binary search tree

b) Draw the binary search tree after inserting values: 14, 0, 35

c) Draw the binary search tree after deleting: 6, 13, 35  
A group of black and white circles with red and green text

Description automatically generated

BT3: Given a list of integer numbers: 2, 1, 10, 6, 3, 8, 7, 13, 20.

a) Draw the heap tree

b) Draw the heap tree after inserting values: 14, 0, 35

c) Draw the heap tree after deleting: 6, 13, 35

A group of black and white lines with circles and dots

Description automatically generated

BT4: Use random.org to generate a set of 10 integers from 1-20 (S1). : **13, 15, 17, 7, 6, 14, 11, 9, 19, 12**

- Insert elements from S1 to a binary search tree one by one and draw the binary search tree after each step.

A group of black and white circles with arrows

Description automatically generated

- Write out the procedure to find and remove the maximum element from binary search tree in detail.

🡺 Đi sang phải cùng và xóa node

- Write out the procedure to find and remove the minimum element from binary search tree in detail.

🡺 Đi sang trái cùng và xóa node

BT5. Use random.org to generate another set of 10 integers from 1-20 (S2). **19, 7, 13, 12, 15, 14, 11, 16, 4, 3**

**17, 6, 9**

- Draw the heap (tree) from S2

A diagram of a network

Description automatically generated

- Insert elements from S1 to this heap one by one and draw the heap after each step.

Insert **17, 6, 9.**

A diagram of a network

Description automatically generated

A diagram of a tree

Description automatically generated

A diagram of a network

Description automatically generated

- Write out the procedure to find and remove the maximum element from binary search tree in detail

B1: Đổi chỗ số cuối (9) với gốc (19)

B2: Xóa nốt cuối(19)

B3: Max Heapify để sắp xếp lại cây heap