Int BinarySearchTree {3, 2, 7, 50, 60, 0, 6}

0	2	3	6	7	50	60
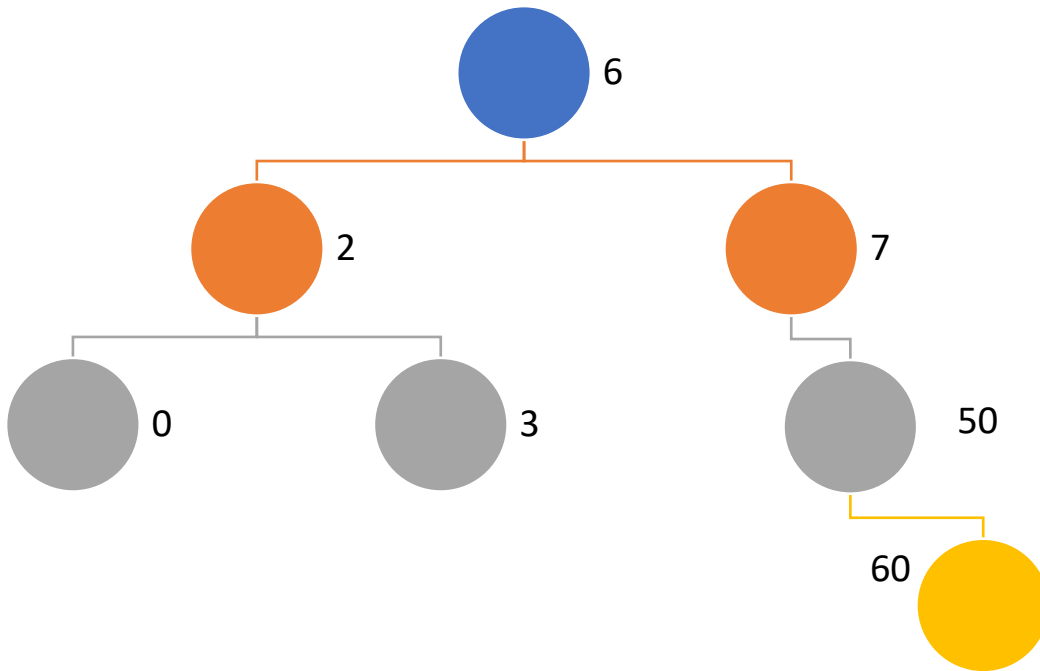
The diagram illustrates when the data was inserted successfully into a binary search tree.

Deliverable 2

In this, we can see the indexes that the data was inserted as. reAllocate() works here because 60

is greater than 50, so we increase the level. If this binary search tree is a complete and the array

is filled. Index of value 60 in this array is 14 – as in the program output.

Deliverable 3

Class point was successfully implemented as the screenshot. The output (10 90) is the point class

object. And was able to print out as instructed

```
Point p(10, 90);
string stringVal = p; // operator string()
cout << stringVal << endl;
```

Deliverable 4


```
Last login: Wed Oct 11 20:15:24 on ttys003
/Users/nguyenthaomy/Desktop/cs310\ hw3/Deliverable4 ; exit;
(base) nguyenthaomy@Nguyens-MacBook-Pro ~ % /Users/nguyenthaomy/Desktop/cs310\ hw3/Deliverable4 ; exit;

Deliverable 4a
inserted item at 0 - 2 3
inserted item at 1 - 1 2
inserted item at 3 - 0 1
inserted item at 4 - 1 3
inserted item at 2 - 3 4
inserted item at 5 - 3 3
inserted item at 6 - 3 5


Deliverable 4b
In order: 0 1          1 2          1 3          2 3          3 3          3 4          3 5

Deliverable 4c
In order - myPointCollection0 1        1 2          1 3          2 3          3 3          3 4              3 5

Deliverable 4d
myPointCollection does contain (1,2) - true
myPointCollection does contain (7,2) - false

Deliverable 4e
After deleting (1,2) - 0 1          1 3          2 3          3 3          3 4          3 5

Deliverable 4f
 - predecessor & successor1 3    3 3

Deliverable 4g
Current node count is 6
Node size is 7
Max node is 3 5
Min node is 0 1

Deliverable 4h
 Ascending Order:        0 1          1 3          2 3          3 3          3 4          3 5
Deliverable 4h
 Descending Order:     3 5          3 4          3 3          2 3          1 3          0 1
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[Process completed]
```