

```

1  #include <iostream>           // std::cout
2  #include <algorithm>          // std::sort
3  #include <vector>              // std::vector
4  #include <fstream>
5  #include <math.h>              /* floor */
6  #include <stdlib.h>
7  #include <cmath>              /* pow */
8
9  using namespace std;
10
11
12  struct Node
13  {
14      int value;
15      Node * left;
16      Node * right;
17
18      Node( int i ): value(i) , left(NULL) , right(NULL) {}
19  };
20
21  class BinTree
22  {
23      Node * root_;
24  public:
25
26      BinTree() { root_ = NULL ; }
27
28      Node * getRoot() { return root_; cout << "getRoot" << endl; }
29
30      void insert( int i )
31      {
32          Node * node = new Node(i);
33
34          Node * pre = NULL;
35          Node * post = root_;
36          while( post != NULL)
37          {
38              pre = post;
39              if( i <= post->value )
40              {
41                  post = post->left;
42              }
43              else
44              {
45                  post = post->right;
46              }
47          }
48
49          if( pre == NULL )
50              root_ = node;
51          else if( i <= pre->value )
52          {
53              pre->left = node;
54          }
55          else
56          {
57              pre->right = node;
58          }
59          return;
60
61      }
62  };
63
64
65
66

```