// searching in a binary search tree

#include <iostream>

using namespace std;

struct node

{

int data;

node\* left;

node\*right;

};

node\*root=NULL;

node\* newnode(int x)

{

node\* newptr=new node;

(\*newptr).data=x;

(\*newptr).left=NULL;

(\*newptr).right=NULL;

return(newptr);

}

node\* insertnode(node\* root,int data)

{

if(root==NULL)

root=newnode(data);

else if(data<=(\*root).data)

root->left=insertnode(root->left,data);

else

root->right=insertnode(root->right,data);

return root;

}

void search(node\* root,int data)

{

if(root==NULL)

cout<<"false";

else if(data==root->data)

{cout<<"true";}

else if(data<root->data)

{search(root->left,data);}

else

{search(root->right,data);}

}

int main()

{

root=insertnode(root,10);

root=insertnode(root,20);

root=insertnode(root,0);

root=insertnode(root,4);

root=insertnode(root,22);

search(root,1);

return(0);

}