#include <iostream>

#include "bst.h"

using namespace std;

using namespace csci\_591;

void menu();

int main()

{

char letter; // character for switch case

int entry; // value to enter into the list

int y; // for storing the length

bst b1; // object of class binary search tree b1

menu(); // Shows the menu.

do

{

cout << "--> ";

cin >> letter;

cout<<endl;

switch ( letter )

{

case 'e':

b1.make\_empty(); // to make list empty

break;

case 'i': cin >> entry ;

b1.insert(entry); // to insert the elements in list

break;

case 'w':

cout<<" The list is "<<b1<<endl; // to write elements of list

break;

case 'r':cin>>entry;

b1.remove(entry); // to remove the elements of list

break;

case 'p':cin>>entry; // to check whether the element is present or not

if(b1.present(entry)==1)

cout<<"value is present"<<endl;

else

cout<<"value is not present"<<endl;

break;

case 'l':

y=b1.length(); // returns the lenght of the list

cout<<"The number of items in the list are "<<y;

break;

case 'h': menu();

break;

default: ;

}

} while ( letter != 'q' );

return 0;

}

void menu( )

{

cout << endl;

cout << "This program responds to commands the user enters to "<<

"manipulate an ordered list of integers, which is "<<

"initially empty. In the following commands, v is any "<<

"integer."<<endl;

cout << " e -- Make set n empty"<<endl;

cout << " i v -- Insert the value v(element) in set n." << endl;

cout << " r v -- Remove the value v(element) from set n." << endl;

cout << " l -- Report the length of the list "<<endl;

cout << " p v -- Is value v present in set n?"<<endl;

cout << " w -- Write out the contents of set n." << endl;

cout << " h -- See this menu." << endl;

cout << " q -- Quit the program." << endl;

}