#include <iostream>

#include "c\_list.h"

using namespace std;

template <class List\_entry>

void print(List\_entry x) {

cout << x << endl;

}

int main() {

List<float> bills;

cout << "This program allows the user to enter one command." << endl;

cout << "Command list is shown below." << endl;

cout << "I - insert one bill." << endl;//insert加入

cout << "S - show all bills." << endl;//traverse遍历

cout << "D - delete one bill." << endl;//remove删除

cout << "Z - print the size." << endl;//size规模

cout << "T - print one bill." << endl;//retrieve提取

cout << "P - replace one bill." << endl;//replace替换

cout << "Q - quit the program." << endl;

cout << endl << "Enter a command:";

char c;

while (cin >> c) {

switch (c) {

case 'I': cout << "Please enter the amount:";

float amount; cin >> amount;

cout << "Please enter the position:";

int pos; cin >> pos;

switch (bills.insert(pos, amount))

{

case success:

cout << "Insert successfully." << endl; break;

case scope\_error:

cout << "Wrong position input!" << endl; break;

case overflow:

cout << "Bill is full!" << endl; break;

}

break;

case 'D': cout << "Please enter the amount:(remove)";

float amount\_r; cin >> amount\_r;

cout << "Please enter the position:(remove)";

int pos\_r; cin >> pos\_r;

switch (bills.remove(pos\_r, amount\_r))

{

case success:

cout << "Remove successfully." << endl; break;

case scope\_error:

cout << "Wrong position input!" << endl; break;

case underflow:

cout << "Bill is empty!" << endl; break;

}

break;

case 'S': cout << "All bills shown below:" << endl;

bills.traverse(print);

break;

case 'Z': cout << "The sizes of the bill:" ;

cout<<bills.size();

break;

case 'T':

cout << "Please enter the position:(retrieve)";

int pos\_t; cin >> pos\_t;

cout << "The one of your choose:";

float x;

switch (bills.retrieve(pos\_t, x))

{

case success:

cout << "Retrieve successfully." << endl; break;

case underflow:

cout <<"Bill is empty!" << endl; break;

case scope\_error:

cout << "Wrong position input!" << endl; break;

}

break;

case 'P'://replace

cout << "Please enter the position:(replace)";

int pos\_p; cin >> pos\_p;

cout << "Please the new value:";

int y; cin >> y;

switch (bills.replace(pos\_p, y))

{

case success:

cout << "Retrieve successfully." << endl; break;

case scope\_error:

cout << "Wrong position input!" << endl; break;

case underflow:

cout << "Bill is empty!" << endl; break;

}

break;

case 'Q': cout << "Program Finished." << endl;

system("pause");

return 0;

}

cout << endl << "Enter a command:";

}

}