#include <iostream>

using namespace std;

int length = 0;

void input(int\*& arr) {

for (int i = 0; i < length; i++) {

cin >> arr[i];

}

}

void push\_b(int\*& arr, int a) {

cout << "push" << endl;

int\* Tarr = new int[length++];

for (int i = 0; i < length; i++) {

if (i < length-1) {

Tarr[i] = arr[i];

}

else {

Tarr[i] = a;

}

}

arr = Tarr;

}

void output(int\*& arr) {

for (int i = 0; i < length; i++) {

cout << arr[i] << " ";

}

}

void pop\_b(int\*& arr) {

cout << endl << "pop" << endl;

int\* Tarr = new int[length--];

for (int i = 0; i < length; i++) {

Tarr[i] = arr[i];

}

arr = Tarr;

}

void insert\_b(int\*& arr, int p, int e) {

cout << endl << "insert" << endl;

length++;

int\* Tarr = new int[length];

for (int i = 0; i < p; i++) {

Tarr[i] = arr[i];

}

Tarr[p] = e;

for (int i = p + 1; i < length; i++) {

Tarr[i] = arr[i - 1];

}

arr = Tarr;

}

void delete\_b(int\*& arr, int p) {

cout << endl << "delete" << endl;

int\* Tarr = new int[--length];

int j = 0;

for (int i = 0; i < length + 1; i++) {

if (i != p) {

Tarr[j] = arr[i];

j++;

}

}

arr = Tarr;

}

void insertp\_b(int\*& arr, int e) {

cout << endl << "insertp" << endl;

int s = 0;

int j = 0;

for (int i = 0; i < length; i++) {

if (arr[i] == e) {

s++;

}

}

int\* Tarr = new int[length-s];

for (int i = 0; i < length; i++) {

if (arr[i] != e) {

Tarr[j] = arr[i];

j++;

}

}

length = length - s;

arr = Tarr;

}

int main()

{

int size;

cin >> size;

cout << "a=";

int a;

cin >> a;

cout << "p=";

int p;

cin >> p;

cout << "e=";

int e;

cin >> e;

int\* arr = new int[size];

length = size;

input(arr);

push\_b(arr, a);

output(arr);

pop\_b(arr);

output(arr);

delete\_b(arr, p);

output(arr);

insert\_b(arr, p, e);

output(arr);

insertp\_b(arr, e);

output(arr);

delete[] arr;

return 0;

}