import java.util.ArrayList;

import java.util.Scanner;

public class Main {

static String NUM = "1000000000000000000";

static String ZERO = "000000000000000000";

static String isNegative = "";

static String result;

// static char[] chineseNum = {'Ò»', 'Ê®', '°Ù', 'Ç§', 'Íò', 'ÒÚ'};

static char[] chineseNum = {'Ò»', '¶þ', 'Èý', 'ËÄ', 'Îå', 'Áù'};

public static void main(String[] args) {

String input = "HAHA";

String output = "";

while(!input.equals("")) {

System.out.println("Please input the number : \n");

Scanner sc = new Scanner(System.in);

input = sc.nextLine();

try {

//Day1

output = eval(input);

//Day2

// output = number2Chinese(input);

} catch (Exception e) {

System.out.println("Wrong Input :( ");

continue;

} finally {

if (!output.equals("")) {

return;

}

}

}

}

private static String number2Chinese(String input) {

StringBuffer output = new StringBuffer();

int len = input.length();

boolean isZero = false;

char[] chineseNumArr = new char[] { 'Áã', 'Ò»', '¶þ', 'Èý', 'ËÄ', 'Îå', 'Áù', 'Æß', '°Ë', '¾Å' };

char[] indexArr = new char[] { '\0', 'Ê®', '°Ù', 'Ç§', 'Íò', 'Ê®', '°Ù', 'Ç§', 'ÒÚ', 'Ê®', '°Ù', 'Ç§'};

for (int j = 0; j <len; j++) {

char chNum = chineseNumArr[Integer.parseInt(input.charAt(j) + "")];

char index = indexArr[len - 1 - j];

if (chNum == 'Áã') {

isZero = true;

if (index == 'ÒÚ' || index == 'Íò') {

output.append(index);

// isZero = false;

}

continue;

}

if (isZero) {

output.append('Áã');

isZero = false;

}

// System.out.println(" chineseNum : " + chNum + " index " + index);

output.append(chNum).append(index);

// System.out.println(" output : " + output);

}

System.out.println(" Result : " + output);

return output.toString();

}

private static String eval(String tt) {

tt = tt.replace(" ", "");

tt = tt.replace("\n", "");

if (tt.indexOf('+') != -1) {

String[] input = formatInput(tt, '+');

tt = add(input[0], input[1]);

} else if (tt.indexOf('-') != -1) {

String[] input = formatInput(tt, '-');

tt = minus(input[0], input[1]);

} else if (tt.indexOf('\*') != -1) {

} else if (tt.indexOf('/') != -1) {

} else {

System.out.println(" Wrong input! ");

}

return tt;

}

private static String[] formatInput(String tt, char c) {

// TODO Auto-generated method stub

String[] input = new String[2];

int index = tt.indexOf(c);

// System.out.println(" tt " + tt);

// System.out.println(" index " + index);

input[0] = tt.substring(0, index);

input[1] = tt.substring(index + 1, tt.length());

return input;

}

private static String minus(String inputStr1, String inputStr2) {

result = "";

String sign = "";

if(inputStr1.equals(inputStr2)){

return "0";

}

if(inputStr1.length() < inputStr2.length()

|| (inputStr1.length() == inputStr2.length() && inputStr1.compareTo(inputStr2) < 0)){

sign = "-";

String tmp = inputStr1;

inputStr1 = inputStr2;

inputStr2 = tmp;

}

while(inputStr2.length() < inputStr1.length()){

inputStr2 = "0" + inputStr2;

}

int index = inputStr1.length() - 1;

int borrow = 0;

while(index >= 0){

int left = inputStr1.charAt(index) - inputStr2.charAt(index) + borrow;

if(left < 0){

borrow = -1;

left += 10;

}

result = left + result;

index--;

}

while(result.indexOf("0") == 0){

result = result.substring(1);

}

System.out.println("Minus result = " + sign + result);

return sign + result;

}

private static String add(String inputStr1, String inputStr2) {

// String inputStr1 = "123456789012345678901234567890123456790";

// String inputStr2 = "9876543210987654321098765432109876543210";

// String inputStr2 = "1";

int lenStr1 = inputStr1.length();

int lenStr2 = inputStr2.length();

int count1 = (int) (lenStr1 / 18);

int count2 = (int) (lenStr2 / 18);

// System.out.println(" lenStr1 " + lenStr1);

// System.out.println(" lenStr2 " + lenStr2);

// System.out.println(" count2 " + count2);

ArrayList<String> list1 = new ArrayList<String>();

ArrayList<String> list2 = new ArrayList<String>();

int index1 = 1;

while(count1 >= 0) {

int start = lenStr1 - index1 \* 18;

int end = lenStr1 - (index1 -1) \* 18;

end = end < 0 ? lenStr1 : end;

start = start < 0 ? 0 : start;

// System.out.println(start);

// System.out.println(end);

list1.add(inputStr1.substring(start, end));

index1++;

count1--;

}

int index2 = 1;

while(count2 >= 0) {

int start = lenStr2 - index2 \* 18;

int end = lenStr2 - (index2 -1) \* 18;

end = end < 0 ? lenStr2 : end;

start = start < 0 ? 0 : start;

// System.out.println(start);

// System.out.println(end);

list2.add(inputStr2.substring(start, end));

index2++;

count2--;

}

// for (int i = 0; i < list1.size(); i++) {

// System.out.println(" list1 : " + list1.get(i));

// }

// for (int i = 0; i < list2.size(); i++) {

// System.out.println(" list2 : " + list2.get(i));

// }

int MinSize = list1.size() < list2.size() ? list1.size() : list2.size();

int MaxSize = list1.size() > list2.size() ? list1.size() : list2.size();

// System.out.println(" MaxSize : " +MaxSize);

// System.out.println(" MinSize : " +MinSize);

int fur = 0;

StringBuffer result = new StringBuffer("");

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

String add = Cal.add(list1.get(i), list2.get(i));

if (add.length() > 18) {

fur = 1;

} else {

fur = 0;

}

add = Long.valueOf(add) + fur + "";

result = result.insert(0, add);

}

if (MaxSize == MinSize) {

System.out.println("Add result = " + result);

return result.toString();

}

for (int i = MaxSize - MinSize; i < MaxSize; i++){

if (list1.size() > list2.size()) {

result = result.insert(0, list1.get(i));

} else {

result = result.insert(0, list2.get(i));

}

}

// System.out.println(Long.MAX\_VALUE + " : " + Long.MIN\_VALUE);

System.out.printf("Add result = \n", result);

return result.toString();

}

static class Cal {

public static String add(String strNum1, String strNum2) {

long num1 = Long.valueOf(strNum1.trim());

long num2 = Long.valueOf(strNum2.trim());

return num1 + num2 + "";

}

public static String minus(String strNum1, String strNum2) {

long num1 = Long.valueOf(strNum1.trim());

long num2 = Long.valueOf(strNum2.trim());

return num1 - num2 + "";

}

}

}