**Report Template:**

**CS205 C/ C++ Program Design Assignment 1**

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Part 2. Result & Verification

In this part, you should present the result of your program by listing the output of test cases and optionally add a screen-shot of the result.

#include <iostream>

#include <string>

using namespace std;

int calculate(string,char)

{

string array;

int a;

cin >> array;

int length = array.length() - 1;

int i, j, mark\_mid = 0, mark\_small = 0, mark\_big = 0, numl = 0, numr = 0;

int long\_l; int sum = 0;

int num = 0;

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

if (array[i] == 'q') {

mark\_mid = i;

break;

}

}

i -= 1;

while (array[i] < 58) {

i -= 1;

if (i == 0)

break;

}

if (i == 0)

mark\_small = i;

if (array[i] > 58 && i != 0)

mark\_small = ++i;

i = mark\_mid;

i += 1;

while (array[i] < 58) {

i++;

if (i == length)

break;

}

if (i == length)

mark\_big = i;

if (array[i] > 58 && i != length)

mark\_big = --i;

for (i = mark\_small; i < mark\_mid; i++)

sum = sum + (array[i] - 48) \* pow(10, mark\_mid - i - 1);

numl = sum;

sum = 0;

for (i = mark\_mid + 1; i <= mark\_big; i++)

sum = sum + (array[i] - 48) \* pow(10, mark\_big - i);

numr = sum;

sum = 0;

int output = numr \* numl;

int storeup = output;

string a;

for (j = 0; output < 1; j++) {

storeup %= 10;

a[j]=storeup;

output /= 10;

storeup = output;

}

int m = a; strlen(a);

for (j = 0; j <= m/2; j++){

int c = 0, d = 0;

c = a[j];

d = a[m - j];

a[m - j] = c;

a[j] = d;

}

for (i=mark\_small+1,j=0;j<=m; j++) {

array[i] = a[j];

}

for (i = mark\_small + 1 + m, j = mark\_big; j <= length; i++, j++)

array[i] = array[j];

cout << array << endl;

}

Part 3. Difficulties & Solutions, or others

1. My thinking are calculate with circulation,at the first time,the program detect the specific character”\*,-,+,=”and so on,and then I firstly calculate the number beside it,for example,3\*5+1,I will firstly calculate 3\*5 and get the number 15,in the second circulate,i will calculate 15+1.
2. Then I use ‘for’ to solve priority,firstly,I ergodic the string array and find “(“and”)”,and slove the array in it,then I find “\*,/”calculate it from left to right;at last,the program calculate”+,-”and receive the result.
3. And I will use this program to do mission 3

Int i;

String s;

For(i=0;i<=200;i++)

S[i]=0;

Cin.get(ch);

If(ch==’=’);

S[ch]=ch;

If(s[ch]!=0)

Ch=s[ch]

To solve it.And mission 4 I use string to slove. If the program find s,t,e,p was connected, it will know it use the function(sqrt),by detect the number of array in string.

1. And the mission 4,I still haven’t any idea.
2. But the time I debug the first part of my program--calculate is largely out of my imagination,so what’s above is all my program.But I will complete it in a few days.