

**“AZƏRBAYCAN HAVA YOLLARI” CJSC NATIONAL AVIATION ACADEMY**

**Individual Work № 10:**

**Topic: Leetcode**

**Subject: Obyektyönümlü proqramlaşdırma**

**Teacher: Mehemmed Shahmaliyev**

**Group: 1459i Student: Ahmad Mammadov**

**Date: Signature:M.A**

**Baku 2022**

**Problem:ROMAN TO INTEGER**

**Solution:**

#include <iostream>

using namespace std;

int roman\_to\_integer(string rstr) {

int n = int(rstr.length());

if (0 == n) {

return 0;

}

int result = 0;

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

switch (rstr[i]) {

case 'I':

result += 1;

break;

case 'V':

result += 5;

break;

case 'X':

result += 10;

break;

case 'L':

result += 50;

break;

case 'C':

result += 100;

break;

case 'D':

result += 500;

break;

case 'M':

result += 1000;

break;

}

}

for (int i = 1; i < n; i++) {

if ((rstr[i] == 'V' || rstr[i] == 'X') && rstr[i - 1] == 'I') {

result -= 1 + 1;

}

if ((rstr[i] == 'L' || rstr[i] == 'C') && rstr[i - 1] == 'X') {

result -= 10 + 10;

}

if ((rstr[i] == 'D' || rstr[i] == 'M') && rstr[i - 1] == 'C') {

result -= 100 + 100;

}

}

return result;

}

int main()

{

string s = "VII";

cout << "Roman " << s << " -> Integer " << roman\_to\_integer(s) << endl;

s = "XIX";

cout << "Roman " << s << " -> Integer " << roman\_to\_integer(s) << endl;

s = "DCCLXXXIX";

cout << "Roman " << s << " -> Integer " << roman\_to\_integer(s) << endl;

s = "MXCIX";

cout << "Roman " << s << " -> Integer " << roman\_to\_integer(s) << endl;

s = "MMMMMMMMMMMMMMMMMMMMMMMCDLVI";

cout << "Roman " << s << " -> Integer " << roman\_to\_integer(s) << endl;

return 0;

}

Problem:Remove element

Solution:

// CPP program to illustrate

// Implementation of clear() function

#include <iostream>

#include <vector>

using namespace std;

int main()

{

vector<int> myvector;

myvector.push\_back(1);

myvector.push\_back(2);

myvector.push\_back(3);

myvector.push\_back(4);

myvector.push\_back(5);

// Vector becomes 1, 2, 3, 4, 5

myvector.clear();

// vector becomes empty

// Printing the vector

for (auto it = myvector.begin(); it != myvector.end(); ++it)

cout << ' ' << \*it;

return 0;

}