#include <iostream>

#include <fstream>

#include <sstream>

#include <vector>

#include <string>

// 函数声明

void readFile(const std::string& filename, std::vector<double>& numbers);

void performOperation(const std::string& operation, const std::vector<double>& numbers);

int main(int argc, char\* argv[]) {

if (argc != 3) {

std::cerr << "Usage: " << argv[0] << " <operation> <filename>" << std::endl;

return 1;

}

std::string operation = argv[1];

std::string filename = argv[2];

std::vector<double> numbers;

readFile(filename, numbers);

performOperation(operation, numbers);

return 0;

}

// 读取文件中的数字

void readFile(const std::string& filename, std::vector<double>& numbers) {

std::ifstream file(filename);

if (!file.is\_open()) {

std::cerr << "Error: Could not open file " << filename << std::endl;

exit(1);

}

double number;

while (file >> number) {

numbers.push\_back(number);

}

file.close();

}

// 执行加减乘除操作

void performOperation(const std::string& operation, const std::vector<double>& numbers) {

if (numbers.empty()) {

std::cerr << "Error: No numbers found in the file." << std::endl;

return;

}

double result = numbers[0];

for (size\_t i = 1; i < numbers.size(); ++i) {

if (operation == "add") {

result += numbers[i];

} else if (operation == "minus") {

result -= numbers[i];

} else if (operation == "multiply") {

result \*= numbers[i];

} else if (operation == "divide") {

if (numbers[i] == 0) {

std::cerr << "Error: Division by zero." << std::endl;

return;

}

result /= numbers[i];

} else {

std::cerr << "Error: Invalid operation." << std::endl;

return;

}

}

std::cout << "Result: " << result << std::endl;

}