9.Write a program that input two numbers and one arithmetic operator in main() and passes them to a function. The function applies arithmetic operator on two numbers on the basis of the operator entered by user using switch statement.

Coding:

#include <iostream>

// Function declaration

void performOperation(double num1, double num2, char op);

int main() {

double number1, number2;

char operatorChar;

// Input two numbers and an arithmetic operator from the user

std::cout << "Enter the first number: ";

std::cin >> number1;

std::cout << "Enter the second number: ";

std::cin >> number2;

std::cout << "Enter an arithmetic operator (+, -, \*, /): ";

std::cin >> operatorChar;

// Call the function to perform the operation

performOperation(number1, number2, operatorChar);

return 0;

}

// Function definition

void performOperation(double num1, double num2, char op) {

switch (op) {

case '+':

std::cout << "Result: " << num1 + num2 << std::endl;

break;

case '-':

std::cout << "Result: " << num1 - num2 << std::endl;

break;

case '\*':

std::cout << "Result: " << num1 \* num2 << std::endl;

break;

case '/':

if (num2 != 0) {

std::cout << "Result: " << num1 / num2 << std::endl;

} else {

std::cout << "Error: Division by zero is not allowed." << std::endl;

}

break;

default:

std::cout << "Error: Invalid operator." << std::endl;

break;

}

}

