# TASK 5:

#include<iostream>

using namespace std;

class Calculator

{

public:

Calculator (){}

template<typename S>

S Add(S a, S b)

{

S temp = 0;

temp = a + b;

return temp;

}

template<typename S>

S Sub(S a, S b)

{

S temp = 0;

temp = a - b;

return temp;

}

template<typename S>

S Mul(S a, S b)

{

S temp = 0;

temp = a \* b;

return temp;

}

template<typename S>

S Div(S a, S b)

{

S temp = 0;

temp = a / b;

return temp;

}

template<typename S>

S Sq(S a)

{

S temp = 0;

temp = sqrt(a);

return temp;

}

};

int main()

{

Calculator obj;

//Addition Functions

cout << "Addition(int,int): " << obj.Add<int>(5, 9) << endl;

cout << "Adittion(int,float): " << obj.Add<float>(12, 9.7) << endl;

cout << "Adittion(float,int): " << obj.Add<float>(14.1, 12) << endl << endl;

//Division Functions

cout << "Division(int,int): " << obj.Div<int>(5, 9) << endl;

cout << "Division(int,float): " << obj.Div<float>(12, 9.7) << endl;

cout << "Division(float,int)" << obj.Div<float>(14.1, 12) << endl << endl;

//Subtraction Functions

cout << "Subtraction(int,int): " << obj.Sub<int>(5, 9) << endl;

cout << "Subtraction(int,float): " << obj.Sub<float>(12, 9.7) << endl;

cout << "Subtraction(float,int)" << obj.Sub<float>(14.1, 12) << endl << endl;

//Subtraction Functions

cout << "Multiplication(int,int): " << obj.Mul<int>(5, 9) << endl;

cout << "Multiplication(int,float): " << obj.Mul<float>(12, 9.7) << endl;

cout << "Multiplication(float,int)" << obj.Mul<float>(14.1, 12) << endl << endl;

//SquareRoot

cout << "SquareRoot(int,int): " << obj.Sq<int>(9) << endl;

cout << "SquareRoot(float,float): " << obj.Sq<float>(12) << endl;

}

# OUTPUT:

