**Assignment 01**

//Q1) Write a functions to add 2 int value, 2 float value, 1 int and 1 float value and vice versa. similary write functions for all other arithmetic operations.

#include <iostream>

using namespace std;

struct Calculator

{

    // Add

    int add(int a, int b) { return a + b; }

    float add(float a, float b) { return a + b; }

    float add(int a, float b) { return a + b; }

    float add(float a, int b) { return a + b; }

    // Suctract

    int sub(int a, int b) { return a - b; }

    float sub(float a, float b) { return a - b; }

    float sub(int a, float b) { return a - b; }

    float sub(float a, int b) { return a - b; }

    // Divide

    int div(int a, int b) { return a / b; }

    float div(float a, float b) { return a / b; }

    float div(int a, float b) { return a / b; }

    float div(float a, int b) { return a / b; }

    // Mul

    int mul(int a, int b) { return a \* b; }

    float mul(float a, float b) { return a \* b; }

    float mul(int a, float b) { return a \* b; }

    float mul(float a, int b) { return a \* b; }

};

int main()

{

    int a, b;

    float c, d;

    Calculator ad;

    cout << "Enter Two Integers : ";

    cout << "\nNumber1 :";

    cin >> a;

    cout << "\nNumber2 :";

    cin >> b;

    cout << "\nAddition : " << ad.add(a, b);

    cout << "\nSub : " << ad.sub(a, b);

    cout << "\nMul : " << ad.mul(a, b);

    cout << "\nDiv : " << ad.div(a, b);

    cout << "\n\nEnter Two Floats : ";

    cout << "\nNumber1 :";

    cin >> c;

    cout << "\nNumber2 :";

    cin >> d;

    cout << "\nAddition : " << ad.add(c, d);

    cout << "\nSub : " << ad.sub(c, d);

    cout << "\nMul : " << ad.mul(c, d);

    cout << "\nDiv : " << ad.div(c, d);

    cout << "\n\nEnter  one integer One Float : ";

    cout << "\nNumber1 :";

    cin >> b;

    cout << "\nNumber2 :";

    cin >> d;

    cout << "\nAddition : " << ad.add(b, d);

    cout << "\nSub : " << ad.sub(b, d);

    cout << "\nMul : " << ad.mul(b, d);

    cout << "\nDiv : " << ad.div(b, d);

    cout << "\n\nEnter One Float one integer : ";

    cout << "\nNumber1 :";

    cin >> c;

    cout << "\nNumber2 :";

    cin >> a;

    cout << "\nAddition : " << ad.add(c, a);

    cout << "\nSub : " << ad.sub(c, a);

    cout << "\nMul : " << ad.mul(c, a);

    cout << "\nDiv : " << ad.div(c, a);

}

Output:

PS D:\Fullstack-Java-FirstBit-Solutions> & 'c:\Users\bhagv\.vscode\.....\TDM-GCC-64\bin\gdb.exe' '--interpreter=mi'

Enter Two Integers :

Number1 :123

Number2 :10

Addition : 133

Sub : 113

Mul : 1230

Div : 12

Enter Two Floats :

Number1 :120.80

Number2 :12.8

Addition : 133.6

Sub : 108

Mul : 1546.24

Div : 9.4375

Enter one integer One Float :

Number1 :120

Number2 :11.999

Addition : 131.999

Sub : 108.001

Mul : 1439.88

Div : 10.0008

Enter One Float one integer :

Number1 :119.9999999

Number2 :10

Addition : 130

Sub : 110

Mul : 1200

Div : 12

PS D:\Fullstack-Java-FirstBit-Solutions>