1. **Arithmetic operations**

Print the results of all arithmetic operations on two given numbers.

Input Format:
Single line input containing, two space-separated integers.

Output Format:
Print output according to discription.

Sample I/O:

Input 1*:*
10
3

Output 1*:*
Sum:13
Difference:7
Product:30
Quotient:3
Remainder:1

Input 2:
15
4

Output 2:
Sum:19
Difference:11
Product:60
Quotient:3
Remainder:3

2. **Can Cross the Bridge**

You are given that a mango weighs **X** kilograms and a truck weighs **Y** kilograms. You want to cross a bridge that can withstand a weight of **Z** kilograms.

Find the maximum number of mangoes you can load in the truck so that you can cross the bridge safely.

It is guaranteed that X <= Y <= Z

Input Format:
Single line input, contains three space-separated integers x, y, z;

Output Format:
Print output according to the discription..

Sample I/O:

Input 1:
2
5
11

Output 1:
3

Input 2:
4
10
20

Output 2:
2

3. Romeo and Juliet

Romeo has **X 5 rupee** coins and **Y 10 rupee** coins. Romeo goes to a shop to buy chocolates for Juliet where each chocolate costs **Z rupees**. Find the maximum number of chocolates that Romeo can buy for Juliet.

Input Format:
Three different lines of input contain integers X,Y,Z.

Output Format:
Print the output according to the description.

Sample I/O:

Input 1:
10
10
10
Output 1:
15

Input 2:
4
4
1000
Output 2:
0

Input 3:
8
1
3
Output 3:
16

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1 Arithmetic Operations

```java
import java.util.Scanner; // Import Section
public class ArithmeticOperations {
    public static void main(String[] args) {
        // Creating a Scanner class object to read user input
        Scanner scan = new Scanner(System.in);

        int a = scan.nextInt(); // reading the value of a
        int b = scan.nextInt(); // reading the value of b

        // Performing Arithmetic Operations and printing
        System.out.println("Sum:" + (a + b));
        System.out.println("Difference:" + (a - b));
        System.out.println("Product:" + (a * b));
        System.out.println("Quotient:" + (a / b));
        System.out.println("Remainder:" + (a % b));
    }
}
```

2 Can Cross the Bridge

```java
import java.util.Scanner; // Import Section
public class CanCrossTheBridge {
    public static void main(String[] args) {
        // Creating a Scanner class object to read user input
        Scanner scan = new Scanner(System.in);

        /* Reading the values of
         * x -> Weight of each mango
         * y -> Weight of the truck
         * z -> Weight the bridge can withstand
        */
        int x = scan.nextInt();
        int y = scan.nextInt();
        int z = scan.nextInt();

        /*
```

```
         * From observation we can find that the
         * maximim number of mangoes we can load into the truck
         * to cross the bridge safely are (z - y) / x
         */
        System.out.print((z - y) / x);
    }
}
```

3 Romeo and Juliet

```
import java.util.Scanner; // Import Section
public class RomeoAndJuliet {
    public static void main(String[] args) {
        // Creating a Scanner class object to read user input
        Scanner scan = new Scanner(System.in);

        /* Reading the values of
         * x -> Number of 5 Rs. coins
         * y -> Number of 10 Rs. coins
         * z -> Cost of each chocolate
         */
        int x = scan.nextInt();
        int y = scan.nextInt();
        int z = scan.nextInt();

        /*
         * From observation we can find that the
         * maximum number of chocolates Romeo can buy
         * is Total_Money (in Rs.) divided by
         * cost of each chocolate
         */
        int totalMoney = 5 * x + 10 * y;
        System.out.print(totalMoney / z);
    }
}
```

[ ]: