Revision.

12-13 → hold

variables

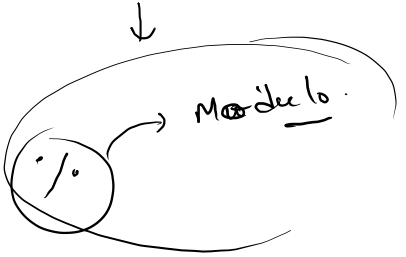
assignment ← L = R

age = 52

operators.

↳ arth. → + - * /

% → Modulo.

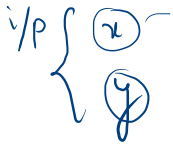


Input.

↳ Scanner → provided by java.


```java

import java.util.*;

public class Main
{
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);   //Scanner object created

        int age = scn.nextInt();
        System.out.println("You have printed " + age);
    }
}

```

Sum and Difference of x and y



You will be given two integers x and y. You have to print the sum of x and y in the first line, and the difference of x and y in the second line.

First integer input should be stored in x, Second integer input should be stored in y.

Input Format

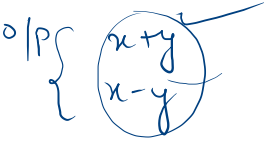
In the first line the value of x will be given and in the second line the value of y will be given.

Constraints

Only integers will be given as input.

Output Format

Sum of x and y will be printed in the first line i.e x+y Difference of x and y will be printed in the second line i.e x-y



Sample Input 0

```
40
10
```

Sample Output 0

```
50
30
```

Language: Java 8

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);

        int x = scn.nextInt();
        int y = scn.nextInt();

        System.out.println(x + y);
        System.out.println(x - y);


    }
}
```

Area and Perimeter 5

Sample Input 0

```
10
20
```

Sample Output 0

```
200
60
```

Sample Input 1

```
20
30
```

Sample Output 1

```
600
100
```

Take length and breadth of the rectangle as input. And print area of the rectangle in the first line and perimeter of the rectangle in the second line.

Input Format

In the first line, length of the rectangle is given as input. In the second line, breadth of the rectangle is given as input.

Constraints

Inputs will be given in integer format. 1<= length <= 2^31 - 1 1 <= breadth <= 2^31 - 1

Output Format

In the first line Area of the rectangle should be printed. In the second line perimeter of the rectangle should be printed.

eg. l = 10
b = 20

2m
10 + 10 + 20 + 20

area = l * b →
peri = 2(l+b)
= 2l + 2b
= l + l + b + b →

i/p { l, b

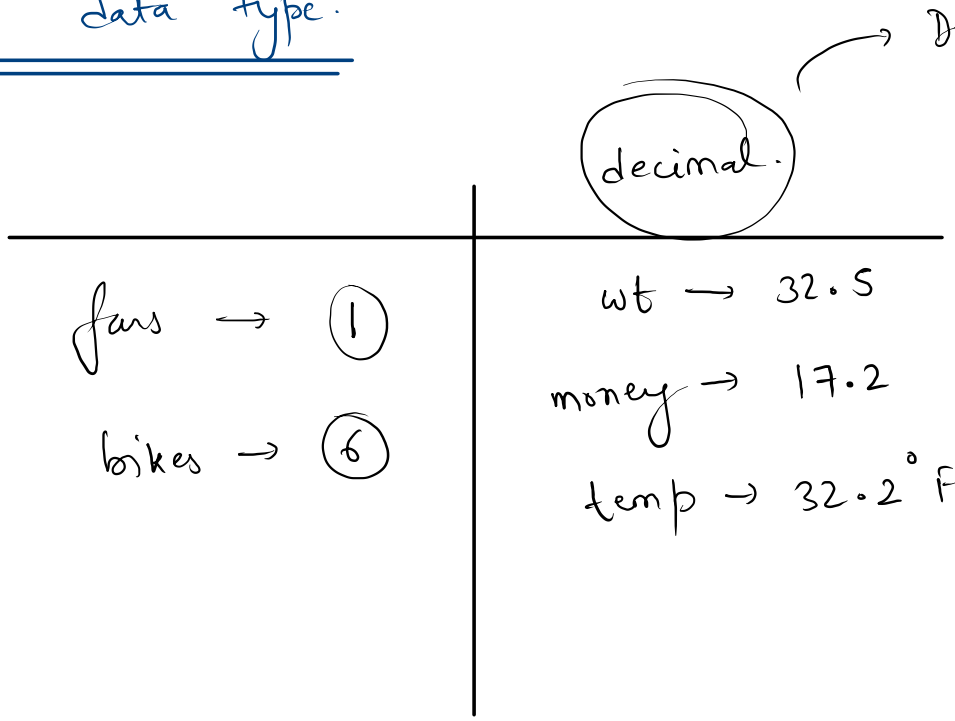
o/p { l * b
l + l + b + b

[1 <= l <= 2^31 - 1
1 <= b <= 2^31 - 1

Language: Java 8

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);

        int l = scn.nextInt();
        int b = scn.nextInt();

        System.out.println(l * b);
        System.out.println(l + l + b + b);
    }
}
```

Double data type.



```java
import java.io.*;
import java.util.*;

public class Main {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        //double age = 52.4;

        double age = scn.nextDouble();
        System.out.println(age);


    }
}
```

Fahrenheit and Celsius

Sample Input 0

```
32.0
```

Sample Output 0

```
0.0
```

Input Format

In each test case, you will get Fahrenheit as input.

Constraints

Fahrenheit will be given as a double data-type.

Output Format

For each test-case, you have to print Celsius in the double format.

$f \Rightarrow c$

$$c = \frac{(f - 32) * 5}{9}$$

eg. $f = 32.0$

$$c = \frac{(32.0 - 32) * 5}{9} = 0.0$$

Submitted Code

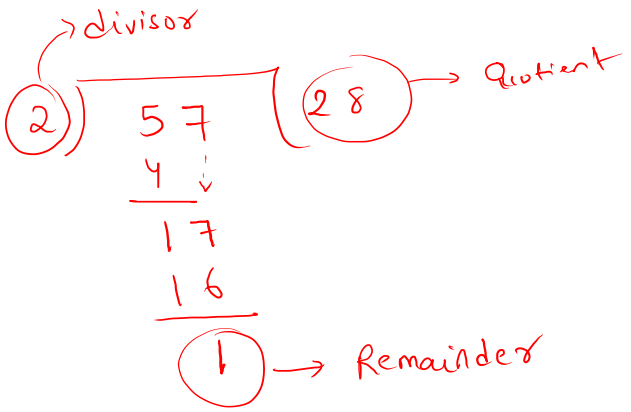
Language: Java 8

```
1
2  import java.util.*;
3
4  public class Solution {
5
6      public static void main(String[] args) {
7          Scanner scn = new Scanner(System.in);
8          double far = scn.nextDouble();
9          System.out.println((far-32) * 5/9);
10     }
11 }
```

Modulo → Remainder.

(%)

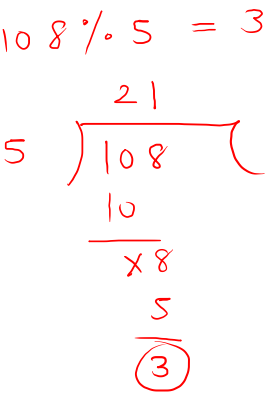
eg.



eg. → 57 % 2 = 1

eg: 57 % 4 = 1

eg.



eg. $3 \% 5 = ? = 3$

$5 \% 3 = 2$

$$3 \overline{)\,5\,} \quad 1, \ 3, \ 2$$

$$5 \overline{)\,3\,}$$

$3 < 5$

$p < q$

$p \% q = p$

* $p \% q = p \quad \ldots \quad p < q$

eg. $3 \% 5 = 3$ $\qquad$ $3 < 5$

$2 \% 5 = 2$

$3 \% 5 = 3$

$4 \% 5 = 4$

$p \quad q$

eg

1. $108 \% 10 = 8$
2. $54 \% 10 = 4$
3. $12345 \% 10 = 5$
4. $12345 \% 100 = 45$
5. $12345 \% 1000 = 345$

last digit = $n \% 10$