

# Add These Numbers

Sometimes, the committee of the 2019 Computing Competitive Programming are too lazy to create a problem. Creating problems requires creativity and good problem-solving skill. In addition, the problem setter needs to write a solution (i.e., a working code) for the problem as well as preparing several test cases. These test cases are later used to check the correctness of the program by means of black-box testing.

This problem is created because one of the problem setters is too busy with academic tasks, but he still wants to create an appropriate problem for a programming contest. Given two positive integers  $a$  and  $b$ , write a program that add all positive integers between  $a$  and  $b$  (inclusive). However, since the result of this addition can be too large, you only need to print the result in modulo  $10^9 + 7$ .

### Input Format

The input consists of a single line containing two positive integers  $a$  and  $b$ .

### Constraints

$$1 \leq a \leq b \leq 10^9$$

### Output Format

The output is just a number  $c$  which is equal to the sum of all integers between  $a$  and  $b$  (inclusive) modulo  $10^9 + 7$ .

### Sample Input 0

```
5 10
```

### Sample Output 0

```
45
```

### Explanation 0

For this example, we compute  $5 + 6 + 7 + 8 + 9 + 10$  and reduce the result to modulo  $10^9 + 7$ . Therefore, the output is  $45$ .

### Sample Input 1

```
99999997 1000000000
```

### Sample Output 1

```
385000015
```

### Explanation 1

For the second example, we calculate  $999999997 + 999999998 + 999999999 + 1000000000$  and reduce the result to modulo  $10^9 + 7$ . The output is **385000015**.