

Sum from M to N (a simple Arithmetic Progression)

Time Limit: 20.0s **Memory Limit:** 64M

What is an Arithmetic Progression?

An arithmetic progression (AP) is a sequence of numbers such that the difference between the consecutive terms is constant. For instance, the sequence 1, 2, 3, 4, 5, 6, . . . is an arithmetic progression with a common difference of 1.

Your program:

1. Create a program that takes a positive integer M as its input.
2. Then input a positive integer N that is equal to or greater than M .
3. Calculate the sum of all integers from M to N .
4. Output the value of the sum.
5. It is expected that your program will work for M and N values up to 1 million.

Sample Input #1 ($M = 1$, $N = 10$):

```
1
10
```

Sample Output #1 ($M = 1$, $N = 10$):

```
55
```

Sample Input #2 ($M = 999999$, $N = 1000000$):

```
999999
1000000
```

Sample Output #2 ($M = 999999$, $N = 1000000$):

```
1999999
```