

[VladP](#) posted a shortest solution challenge

Reward: **2000**

For a given positive integer N find the sum of positive integers that are not greater than N and are coprime with N .

Input 1 (N) → integer :

$1 \leq N \leq 5 \cdot 10^4$

Output → integer :

sum of coprimes

```
1 int coprimeSum(int N) {
2     struct Helper {
3         int gcdEuclid(int a, int b) {
4             if( a == 0) {
5                 return b;
6             }
7             return gcdEuclid(b % a, a);
8         }
9     };
10    bool sonCoprimos(int a, int b) {
11        if(gcdEuclid(a,b) == 1) return true;
12        return false;
13    }
14
15    };
16
17    Helper h;
18    int sum = 0;
19
20    for(int i = 1; i <= N; i++) {
21        if(h.sonCoprimos(i, N)) {
22            sum += i;
23        }
24    }
25    return sum;
26 }
27
```

>> All tests passed!

