You are given a positive integer N. Find the number of pairs (A, B) where A and B are co-prime positive integers and A ≤ B ≤ N.

* **[time limit] 3000ms (cs)**
* **[input] integer N**

upper bound for numbers, N < 1000

* **[output] integer**

number of coprime pairs

<https://codefights.com/challenge/xbvvxDYQCuKbEpWTW/main>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int GCD(int a, int b)

{

if (a == 0) return b;

return GCD(b % a, a);

}

static bool SonCoprimos(int a, int b)

{

if (GCD(a, b) == 1) return true;

return false;

}

static int coprimePairs(int N)

{

int ans = 0;

for (int i = 0; i <= N; i++)

{

for (int j = i + 1; j <= N; j++)

{

if (SonCoprimos(i, j))

{

ans++;

}

}

}

return ans;

}

static void Main(string[] args)

{

Console.WriteLine(coprimePairs(43));

Console.ReadLine();

}

}

}