Given an integer K. Output the sum of the first K prime numbers modulo 1000000007. 1 <= K <= 70000

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

the integer K

* **[output] integer**

the sum modulo 1000000007

<https://codefights.com/challenge/xbkLa6dxW7xWeS6NA/main>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static bool esPrimo(long n)

{

if (n < 2) return false;

if (n == 2) return true;

if (n % 2 == 0) return false;

long sqr = (long)Math.Sqrt(n);

for (long i = 3; i <= sqr; i += 2)

{

if (n % i == 0) return false;

}

return true;

}

static long PrimeSum(int K)

{

long sum = 0;

int kth = 0;

for (long i = 2; kth < K; i++)

{

if (esPrimo(i))

{

sum += i;

kth++;

}

}

return sum % 1000000007;

}

static void Main(string[] args)

{

Console.WriteLine(PrimeSum(13));

Console.ReadLine();

}

}

}