**Prime Number**

Attempted by: **1669**

/

Accuracy: **83%**

/

Maximum Score: **10**

/

34 Votes

Tag(s):

Very-Easy

**PROBLEM**

**EDITORIAL**

**MY SUBMISSIONS**

**ANALYTICS**

You are given an integer N. You need to print the series of all prime numbers till N.

Input Format

The first and only line of the input contains a single integer N denoting the number till where you need to find the series of prime number.

Output Format

Print the desired output in single line separated by spaces.

Constraints

1<=N<=1000

**SAMPLE INPUT**

9

**SAMPLE OUTPUT**

2 3 5 7

**Time Limit:**5.0 sec(s) for each input file.

**Memory Limit:**256 MB

**Source Limit:**1024 KB

**Marking Scheme:**Marks are awarded when all the testcases pass.

**Allowed Languages:**C, C++, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Scala 2.11.8, Swift, Visual Basic

<https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problems/algorithm/prime-number-8/>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static void SieveOfEratosthenes(int n)

{

// Create a boolean array "prime[0..n]" and initialize

// all entries it as true. A value in prime[i] will

// finally be false if i is Not a prime, else true.

bool[] prime = new bool[n + 1];

//memset(prime, true, sizeof(prime));

for (int i = 0; i < prime.Length; i++)

{

prime[i] = true;

}

for (int p = 2; p \* p <= n; p++)

{

// If prime[p] is not changed, then it is a prime

if (prime[p] == true)

{

// Update all multiples of p

for (int i = p \* 2; i <= n; i += p)

prime[i] = false;

}

}

// Print all prime numbers

for (int p = 2; p <= n; p++)

if (prime[p])

Console.Write(p + " ");

}

static void Main(string[] args)

{

int n = int.Parse(Console.ReadLine());

SieveOfEratosthenes(n);

Console.ReadLine();

}

}

}