

Twin Primes (75 points)

Introduction

One of the great open questions of number theory is whether there exists infinitely many **Twin Primes**.

[Twin Primes](http://en.wikipedia.org/wiki/Twin_prime) (http://en.wikipedia.org/wiki/Twin_prime) are a pair of prime numbers p such that given a prime number $p[1]$, $p[2]=p[1]+2$ is also a prime.

Given a **number K**, can you find the **largest twin primes p** such that $p[1], p[2] \leq K$?

Input Specifications

Your program will take a number **K** ($5 \leq K \leq 1000$).

Output Specifications

Based on the input, print out the closest pair of **twin primes** $\leq K$ comma-separated in ascending order.

Sample Input/Output

Input

5

Output

3,5

Explanation

3 and 5 are both prime numbers ≤ 5 and $3+2=5$, making them twin primes.