

A promotional image for the movie 'The Hunger Games: Mockingjay - Part 1'. It features Katniss Everdeen, played by Jennifer Lawrence, in her Mockingjay costume. She has large, detailed brown wings and is holding a bow with arrows. The background is a fiery, orange and yellow circular frame. Overlaid on the image is white text.

**Prime Pair Sets
challenge
(solo uno si salverà)
(insieme di coppie
prime)**

Regole

- Prima regola: non parlate mai della Prime Pair Sets Challenge.
- Seconda regola del Prime Pair Sets Challenge : non dovete parlare mai del Prime Pair Sets Challenge.
- Terza regola del Prime Pair Sets Challenge: non dovete parlare mai del Prime Pair Sets Challenge.
- Quinta regola del **Prime Pair Sets Challenge**: vince chi scrive (per primo) un programma C/C++ che risolva il problema...

Le armi a vostra disposizione

- C++
- C



You are given a set of prime numbers, $P = \{p_1, p_2, p_3, \dots p_n\}$,

where each p_i is a distinct prime number.

Your task is

- generate the set P (n is in input ;))
- validate the set P (only prime numbers
- find a subset of prime numbers from P , such that the sum of any two prime numbers in the subset is also a prime number.

In other words, you need to find a set $S = \{s_1, s_2, s_3, \dots s_k\}$, where

s_i is a prime number,

and for all s_i, s_j in S ,

$s_i + s_j$ is also a prime number.

n = 6 (input)

P = {2, 3, 5, 7, 11, 13}

Valid > Yes

In this case, your task is to find a subset S from the set P, where the sum of any two prime numbers in S is also a prime number.

Solution:

One possible solution for this example could be:

$S = \{2, 3, 7\}$

If we check all possible combinations of pairs from S, we can see that the sum of any two prime numbers from S is also a prime number:

Print all the combinations:

$2 + 3 = 5$ (a prime)

$2 + 7 = 9$ (not a prime)

$3 + 7 = 10$ (not a prime)

$S = \{2, 3, 7\}$ is a valid solution for this problem.

Cosa ottiene il vincitore?



- Gloria
- Presentare il progetto ai colleghi
- Un caffè



Visto che siamo buoni

- ... si può fare in gruppo... ma...
- Massimo 3 persone
 - il caffè si divide nel gruppo