Problem 5

Sum of Two Prime Numbers

Some prime numbers can be written as the sum of two other prime numbers. For example, 19 is a prime number and it is the sum of 17 and 2 which are both prime numbers.

Your job is to find the largest prime number, less than or equal to N, $10 <= N <= 1000000$, that can be written as the sum of two prime numbers.

The input file (DATA5) will contain five lines of data. Each line will contain a value for N.

The output file (OUT5) will contain five lines of data, corresponding to each line of the input file. The line will contain the largest prime number less than or equal to N, that can be written as the sum of two prime numbers.

<u>Sample Input (Two lines of data given)</u>

```
28
1000
```

<u>Sample Output</u>

```
19
883
```