Program-07

A Goldbach number is a positive even integer that can be expressed as the sum of two odd primes.  
  
Note: All even integer numbers greater than 4 are Goldbach numbers.  
  
Example:  
  
6 = 3 + 3  
10 = 3 + 7  
10 = 5 + 5  
  
Hence, 6 has one odd prime pair 3 and 3. Similarly, 10 has two odd prime pairs, i.e. 3 and 7, 5 and 5.  
  
Write a program to accept an even integer 'N' where N > 9 and N < 50. Find all the odd prime pairs whose sum is equal to the number 'N'.  
  
Test your program with the following data and some random data:  
  
Example 1  
  
INPUT:  
N = 14  
  
OUTPUT:  
PRIME PAIRS ARE:  
3, 11  
7, 7  
  
Example 2  
  
INPUT:  
N = 30  
  
OUTPUT:  
PRIME PAIRS ARE:  
7, 23  
11, 19  
13, 17  
  
Example 3  
  
INPUT:  
N = 17  
  
OUTPUT:  
INVALID INPUT. NUMBER IS ODD.  
  
Example 4  
  
INPUT:  
N = 126  
  
OUTPUT:  
INVALID INPUT. NUMBER OUT OF RANGE.