FOUR IN A ROW

Given a positive integer, tell whether it is equal to the sum of four consecutive integers.

An input file, which must always be called **four.txt**, may contain any number of integers, one per line. The sample output shows the exact form that your program's output must also produce.

Sample input data (four.txt)
2
5
41
82

Sample Output:
2 is the sum of four consecutive integers -1+0+1+2
5 is not the sum of four consecutive integers
41 is not the sum of four consecutive integers
82 is the sum of four consecutive integers 19+20+21+22

Judge Data Set 1 – Input

1
6
55
27000
27001
27002
27003

Judge Data Set 1 – Output (10 marks each except for 2 and 2nd last 25 marks each)

1 is not the sum of four consecutive integers
6 is the sum of four consecutive integers 0+1+2+3
55 is not the sum of four consecutive integers
27000 is not the sum of four consecutive integers
27001 is not the sum of four consecutive integers
27002 is the sum of four consecutive integers 6749+6750+6751+6752
27003 is not the sum of four consecutive integers

Judge Data Set 2 – Input

-112
600
551
7000
7001
7002
7003

Judge Data Set 2 – Output (10 marks each except for 2nd last output 40 marks)

-112 is not the sum of four consecutive integers
600 is not the sum of four consecutive integers
551 is not the sum of four consecutive integers
7000 is not the sum of four consecutive integers
7001 is not the sum of four consecutive integers
7002 is the sum of four consecutive integers 1749+1750+1751+1752
7003 is not the sum of four consecutive integers