1. Given a maximum of 100 digit numbers as input, find the difference between the sum of odd and even position digits

Test Cases

Case 1

Input: 4567

Expected Output: 2

Explanation : Odd positions are 4 and 6 as they are pos: 1 and pos: 3, both have sum 10. Similarly, 5 and 7 are at even positions pos: 2 and pos: 4 with sum 12. Thus, difference is 12 – 10 = 2

Case 2

Input: 5476

Expected Output: 2

Case 3

Input: 9834698765123

Expected Output: 1

1. One programming language has the following keywords that cannot be used as identifiers:

break, case, continue, default, defer, else, for, func, goto, if, map, range, return, struct, type, var

Write a program to find if the given word is a keyword or not

Test cases

Case 1

Input – defer

Expected Output – defer is a keyword

Case 2

Input – While

Expected Output – while is not a keyword

3. **Consider the below series:**  
 **1, 2, 1, 3, 2, 5, 3, 7, 5, 11, 8, 13, 13, 17…..**

This series is a mixture of 2 series fail the odd terms in this series form a Fibonacci series and all the even terms are the prime numbers in ascending order

Write a program to find the Nth term in this series

The value N in a positive integer that should be read from mm. The Nth term that is calculated by the program should be written to STDOUT Otherthan the value of Nth term , no other characters / string or message should be written to STDOUT.

For example, when N:14, the 14th term in the series is 17 So only the value 17 should be printed to STDOUT