

組合語言 第三次上機考

2021.12.29

The $3n+1$ Problem

Input:

For each test case, input two unsigned numbers. If 0 is read, end the program. Detail please read $3n+1.pdf$ attached.

Output:

For each test case, print out the maximum cycle-length between two input numbers (inclusive).

Sample Input / Output

Sample Input

Sample Output

10	10 1 20
1	100 200 125
100	201 210 89
200	900 1000 174
201	10 65536 340
210	1000 999999 525
900	
1000	
10	
65536	
1000	
999999	
0 ; end of input	

評分與扣分標準

100 分:

1. 扣 20 分 Without using multi-module program, i.e, `XXX.inc`, `Main.asm`, `XXX.asm`, ...
2. 扣 20 分 Without write a procedure returning the cycle-length for a given number (input parameters).
3. 扣 20 分 if your program calls the C/C++ library functions.
4. 扣 100 分 Without printing out the correct answers.