

組合語言 第一次上機考

20191015

Prime Generator

Input:

3 unsigned integers M, N, T

Output:

All prime numbers between X and Y (included) and the number of primes, where $X = \min(M, N)$ and $Y = \max(M, N)$. Print T primes for each line.

Sample Input/Output

37 11 5	11 13 17 19 23 29 31 37 8
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評分與扣分標準 (1)

85:

1. C/C++ `main()` calls x86 Assembly `asmMain` procedure.
2. `asmMain` procedure calls `scanf()` and `printf()`.
3. Write C/C++ `isPrime()` function using `sqrt()` function.
扣 10 分 without using `sqrt()`.
4. 扣 10 分 without printing k primes for each line.
5. 扣 10 分 without printing the number of primes.
6. 扣 10 分 if you include `irvine32.inc` in your assembly code.

評分與扣分標準 (2)

100:

Write a x86 Assembly **asmIsPrime** procedure using floating point instructions to compute the square root of a number.

扣 5 point without using floating point instructions.