Computer Architecture (CS F342)

Lab Test-1 (Sem-1 2021-22) Section: P2

Date: 06-October-2021 (Wednesday) Total time: 60 minutes

Weightage: 10% Mode: Open book

Question: The Fibonacci series is the series of numbers: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34,… and so on, s.t. any number in the series is found by adding up the two numbers before it. Write a MIPS program to find all possible pairs within a N Fibonacci number series whose sum is greater than than a given number say M. N and M will be taken from user. Note: Remove the duplicate pairs, and consider unordering in pair i.e., consider (2,8) and (8,2) as same and print either of the pair.

 # Sample test case:
#Input: N = 7
#Input: M (Target sum) = 3
#Output: Pairs: (0,5) (0,8) (1,3) (1,5) (1,8) (2,3) (2,5) (2,8) (3,5) (3,8) (5,8)

Instructions:

1. The lab exam is of 60 minutes, including the upload time is of 10 minutes.
2. Please ensure that your computers/laptops/desktops etc. are in working condition.
3. Your system should have QtSpim installed and make sure it is working, before the exam begins.
4. Please ensure that you have proper internet connection for the entire 2 hours of lab. You should arrange for contingency plans in case of failure for any of the above.
5. Please write your program in a word or text file only. Save it as **ID_section_test1.a/.s/.asm** file. For e.g. 2019A7PS0236H_P2_test1.asm. **Do not zip your file.** Please write your name, ID, Contact no. on your program file as comments. A sample is shown below.

```
#ID
#Name
#Contact No.
# Email

Your program starts here….
```

6. If you face any difficulty in uploading the program, please contact the instructors immediately with proper justification.
7. Students must refrain from academic dishonesty. Similarity in programs will lead to penalization.

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