

Computer Architecture (CS F342)

Lab Test-1 (Sem-1 2021-22) Section: P3

Date: 08-October-2021 (Friday) Total time: 60 minutes

Weightage: 10% Mode: Open book

Question: Find the sum of all the prime numbers that can be formed from the digits of a given number (consider Max 10 digit input). The prime numbers constructed should be formed *without changing their position* in the original number. Your program should include a proper and useful prompt for input, and print the results in a meaningful manner.

Note: If there are repeated prime number consider the duplicate in sum. You can print only output.

Sample test case:

#Enter the number of digits: 5

#Enter the number: 75349

#Output: 417

#Explanation: 3+5+7+53+349=417 (Here 43 is also prime but should not be considered since it will change the respective position of the digits in the original number)

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_P3_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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