WRITTEN TEST

SOFTWARE ENGINEER

**Instructions**

* The test is to be completed in one hour.
* Any programming language can be used. We are not interested with the programming syntax; we are interested with the logic behind the solution.
* Write your own function.

**Tips**

* Think outside the box!

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Test Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write an efficient function that will find the **second largest** number in an array of unsorted integers.

Example:

Input: 12 5 7 17 8 0 -1 16 7

Output: 16

2. Please create a function which can get the name in case of sort the people in grade order asc then point order desc

Input

data = [

'evan|50000|D',

'jefry|70000|C',

'rizky|30000|D',

'hanson|10000|B',

'candra|30000|A',

'goklas|20000|A',

'hendra|20000|B',

'surya|30000|A',

]

output [ 'candra','surya','goklas','hendra','hanson','jefry','evan','rizky' ]

Note :

Grade = A, B ,C …

Point = 50000, 70000 …

3.

Palindrom.

A string is said to be palindrome if the reverse of the string is the same as original string

Please write a function which can determine if a string given is a palindrom or not

* Default string reverse function is not allowed to use

Sample :

Input : racecar

Output : palindrom

Input : bringback

Output : not palindrom

Input : neveroddoreven

Output : palindrom

Input : carisonrace

Output : not palindrom