**PAPER TEST**

**FOR SOFTWARE ENGINEERS**

Duration: 30 minutes

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| Full Name: | Date of Birth: |
| Email: | Mobile phone: |

**TEST OVERVIEW**

*This paper test is for us to know better your logical thinking and coding style. The solutions are not necessary executable, but should be well structured with a thoughtful algorithm.*

**QUESTIONS**

1. **Valid Parentheses (5 points)**

Given a string **s** containing just the characters '**(**', '**)**', '**{**', '**}**', '**[**' and '**]**', determine if the input string is valid. An input string is valid if:

* Open brackets must be closed by the same type of brackets.
* Open brackets must be closed in the correct order.
* Every close bracket has a corresponding open bracket of the same type.

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| *Example 1:*  **Input:** s = "()"  **Output:** true | *Example 2:*  **Input:** s = "(]"  **Output:** false |

1. **Valid Anagram (5 points)**

Given two strings **s** and **t**, return true if **t** is an anagram of **s**, and false otherwise.

An ***Anagram*** is a word or phrase formed by rearranging the letters of a different word or phrase, typically using all the original letters exactly once.

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| *Example 1:*  **Input**: s = "anagram", t = "nagaram"  **Output**: true | *Example 2:*  **Input**: s = "rat", t = "car"  **Output**: false |