

Take-at-Home Interview Test

Instructions

- There are four (4) questions.
- Before beginning, read all questions to allocate your time properly.
- Answer the questions by writing pseudocode, code snippets, or code files. • Feel free to make use of standard or popular libraries, as long as it doesn't reduce your answer to one line of code.
- If any part of a question is ambiguous, decide for yourself how to proceed and briefly describe your decision with your answer.
- Deliver your finished products in an organized and professional manner of your choosing.
- After delivering your answers, please let us know if you have any feedback on the questions.

Question 1

Implement the following requirements using any language or pseudocode: • A minimal "User" class containing a unique User ID, User Name, and Email Address. • One public function/method which accepts as input a list of User IDs and returns a set of instances of Users found in an existing database table. Be sure to open the DB connection, execute a query, and process the record(s).

Question 2

Write a method that accepts a CamelCase string which splits it into separate words in "sentence case". Please do not use regular expressions.

Example

Input: string "thisIsMySentence"

Output: string "This is my sentence"

Question 3

Write a method to convert a string containing a comma-separated list of integers into a new string composed of the characters represented by each integer.

Example

Input: string "73,32,119,105,110,33"

Output: string "I win!"

Question 4

Refactor this method as best you can.

```
public string Foobar(int a, int b)
{
    int countA = 0;
    for (int i = 0; i <= a; i++)
    {
        countA = countA + i;
    }

    string result = "Sum of A: ";
    result += string.Format("{0}", countA);

    int countB = 0;
    for (int j = 0; j <= b; j++)
    {
        countB += j;
    }

    result += "; Sum of B: ";
    result += string.Format("{0}", countB);

    return result;
}
```