# C++ Advanced – Exam Retake (15 Mar 2020)

Write C++ code for solving the tasks on the following pages.

Code should compile under the C++11 standard.

Submit your solutions here: <https://judge.softuni.bg/Contests/1813/CPlusPlus-Advanced-Exam-15-Mar-2020>

Any code files that are part of the task are provided under the folder **Skeleton**.

Please follow the exact instructions on uploading the solutions for each task.

# Task 1 – String Concatenator

Your task is to write a program that concatenates (appends) two strings following a provided concatenation strategy.   
  
**An implementation** for the StringConcatenator class must be provided.  
  
Two string and a concatenation strategy will be read from the console.  
The possible strategies are listed in **Defines.h** header file.  
  
enum class ConcatenateStrategy

{

LEFT\_1\_RIGHT\_1 = 0,

LEFT\_2\_RIGHT\_1 = 1,

LEFT\_1\_RIGHT\_2 = 2

};

* A LEFT\_1\_RIGHT\_1 strategy would mean that in your result string you should take 1 letter from the left string, then 1 letter from the right string until the source **left** and right **string** are empty.
* A LEFT\_2\_RIGHT\_1 strategy would mean that in your result string you should take 2 letter from the left string, then 1 letter from the right string until the source **left** and right **string** are empty.
* A LEFT\_1\_RIGHT\_2 strategy would mean that in your result string you should take 1 letter from the left string, then 2 letter from the right string until the source **left** and right **string** are empty.

If in the process of concatenation one of the source **left** or **right** strings gets empty (or is empty to begin with) – you simply concatenate all the remaining characters from the other string.

### Restrictions

You should only submit **.h** and **.cpp** files compressed in a **.zip** archive.  
There should be no folders in your **.zip** archive.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 0  1234  abcd | 1a2b3c4d |
| 1  1234  abcd | 12a34bcd |
| 2  PieceOfCake | PieceOfCake |