**CPP Problem Design Example**

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| **Subject:** **Input\_Output3** |
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| **Main testing concept:** 基本輸入輸出   |  |  | | --- | --- | | **Basics** | **Functions** | | ■ C++ BASICS  □ FLOW OF CONTROL  □ FUNCTION BASICS  □ PARAMETERS AND OVERLOADING  □ ARRAYS  □ STRUCTURES AND CLASSES  □ CONSTRUCTORS AND OTHER TOOLS  □ OPERATOR OVERLOADING, FRIENDS,AND REFERENCES  □ STRINGS  □ POINTERS AND DYNAMIC ARRAYS | □ SEPARATE COMPILATION AND NAMESPACES  □ STREAMS AND FILE I/O  □ RECURSION  □ INHERITANCE  □ POLYMORPHISM AND VIRTUAL FUNCTIONS  □ TEMPLATES  □ LINKED DATA STRUCTURES  □ EXCEPTION HANDLING  □ STANDARD TEMPLATE LIBRARY  □ PATTERNS AND UML | |
| **Description:**  Given an arbitrary number X(double), a positive integer M, a positive integer N, and a character C, please output it as follows:   * The decimal (excluding the decimal point) must occupy N characters in the output and the decimal number N digits must be unconditionally discarded. If the decimal part of X is less than N digits, please make up 0. * If the corrected number of X characters (including negative and decimal points) is less than M words, please fill in the input character C at the beginning of the number, so that the number of characters C plus the number itself contains exactly the number of characters. Meet the M digits.   **Input:**  Each line represents a group of X, M, N, and C. The four inputs are separated by spaces.  The program continues to ask for input, and ends if EOF is read.  Please note that C may be a space.  **Output:**  Each line is output according to the requirements of the topic.  **Sample Input / Output：**   |  |  | | --- | --- | | Sample Input | Sample Output | | 3.14159265358979323846 5 2 G | G3.14 | | 3.14 8 3 X | XXX3.140 | | 3 8 0 C | CCCCCCC3 | | -3 8 5 C | -3.00000 | |
| **□ Eazy,Only basic programming syntax and structure are required.**  **■ Medium,Multiple programming grammars and structures are required.**  **□ Hard,Need to use multiple program structures or complex data types.** |
| **Expected solving time:**  30 minutes |
| **Other notes:** |