# **Find Dates**

#### **Time limit:** 1.0s **Memory limit:** 64M

I have a document full of dates that you need to process. I am really busy, so I need you to write a program for me to find all the dates. I only want valid dates, that is dates that actually exist, in the format <a href="YYYY-MM-DD">YYYY-MM-DD</a> or does not actually exist must be ignored. A valid date will also have non-alphanumeric characters on both sides.

Note: Leap years are very important for me.

# **Input Specification**

The first line is an integer N, the number of lines in the input. The next N lines will be the document you need to process.

### **Output Specification**

You are to output all valid dates in the exact format (YYYY-MM-DD) inside the document.

#### **Sample Input**

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Archduke Franz Ferdinand was killed on 1914-06-28. On 1914-07-28, Austria-Hungary declared war on Serbia. Germany attacked Luxemburg on 08-02, and war was declared on France on 1914-08-03. On 04-08-1914, Britain declared war.

# **Sample Output**

1914-06-28

1914-07-28

1914-08-03