PHP Programming – Puzzle

Please read the following programming puzzle carefully, and then write a PHP program for it.

Information

A *crazy computer* **validates** *CrazyID* strings, if it has an “Private-Hidden-Program”, or **PHP**, anywhere in the **outside** of any [square bracketed] sections, and a corresponding “House-Property- Hub”, or **HPH**, anywhere **inside** the [square bracketed] sequences. A **PHP** is any three-letter sequence which has the same letter twice with a different letter between them, such as “uvu” or “aha”. A corresponding **HPH** is the same letters but in reversed positions, e.g., “vuv” and “hah”, respectively. There can be many such [square bracket] sequences of any length, in a *CrazyID*.

Let's look at some examples, of *CrazyID*, and whether they are validated or not.

|  |  |  |
| --- | --- | --- |
| **CrazyID** | **Validated** | **Why?** |
| uvu[vuv]xyz | **Yes** | Because “uvu” is outside square brackets with  corresponding “vuv” within square brackets. |
| php[php]php | No | Because “php” is within square brackets, but  there is NO “hph” outside square brackets. |
| bbb[aha]hah | **Yes** | Because “hah” is outside square brackets with corresponding “aha” within square brackets. The “bbb” is NOT related because the interior character must be different. |
| abcde[fghije]klmn[oprst]uvz | No | There are NO PHP and its HPH sequence. |
| jajbj[bjb]cdb | **Yes** | “jaj” has no corresponding “aja”, but “jbj” has a corresponding “bjb”, even though “jaj” and “jbj” overlap. |

Problem

Write a PHP program to find out how many such *CrazyIDs* in your puzzle input (given below) are **validated** by the *crazy computer*? Your PHP program should only output an integer value of the number of *CrazyIDs* that are validated.

Puzzle Input

You will get a Puzzle Input file. **Each line of the Puzzle Input file is a *CrazyID*.** There are a total of 2000 lines (*CrazyIDs*) in your Input file. Your puzzle input can be downloaded here:

What we need from you

* The output of your program, that is the total number (integer) of validated *CrazyIDs*.
* The PHP program you wrote to calculate this, which will be evaluated based on logic, clarity, proper indentation, and code comments.