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--- Day 7: Internet Protocol Version 7 ---

While snooping around the local network of EBHQ, you compile a list of IP addresses (they're IPv7, of course; IPv6 is much too limited). You'd like to figure out which IPs support TLS (transport-layer snooping).

An IP supports TLS if it has an Autonomous Bridge Bypass Annotation, or ABBA. An ABBA is any four-character sequence which consists of a pair of two different characters followed by the reverse of that pair, such as `xyyx` or `abba`. However, the IP also must not have an ABBA within any hypernet sequences, which are contained by square brackets.

For example:

- `abba[mnop]qrst` supports TLS (`abba` outside square brackets).
- `abcd[bddb]xyyx` does not support TLS (`bddb` is within square brackets, even though `xyyx` is outside square brackets).
- `aaaa[qwer]tyui` does not support TLS (`aaaa` is invalid; the interior characters must be different).
- `i0xxoj[asdfgh]zxcvbn` supports TLS (`0xx0` is outside square brackets, even though it's within a larger string).

How many IPs in your puzzle input support TLS?

Your puzzle answer was `110`.

--- Part Two ---

You would also like to know which IPs support SSL (super-secret listening).

An IP supports SSL if it has an Area-Broadcast Accessor, or ABA, anywhere in the supernet sequences (outside any square bracketed sections), and a corresponding Byte Allocation Block, or BAB, anywhere in the hypernet sequences. An ABA is any three-character sequence which consists of the same character twice with a different character between them, such as `xyx` or `aba`. A corresponding BAB is the same characters but in reversed positions: `yxy` and `bab`, respectively.

For example:

- `aba[bab]xyz` supports SSL (`aba` outside square brackets with corresponding `bab` within square brackets).
- `xyx[xyx]xyx` does not support SSL (`xyx`, but no corresponding `yxy`).
- `aaa[kek]eke` supports SSL (`eke` in supernet with corresponding `kek` in hypernet; the `aaa` sequence is not related, because the interior character must be different).
- `zazbz[bzb]cdb` supports SSL (`zaz` has no corresponding `aza`, but `zbz` has a corresponding `bzb`, even though `zaz` and `zbz` overlap).

How many IPs in your puzzle input support SSL?

Your puzzle answer was `242`.

Both parts of this puzzle are complete! They provide two gold stars: \*\*

At this point, you should return to your Advent calendar and try another puzzle.

If you still want to see it, you can get your puzzle input.

You can also [Share] this puzzle.

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