**Q2:**

**Functional Explanation**

This function serves the purpose of transforming a user-input sequence of characters, representing a code block, into a sequence of tokens. Instead of employing DFA or splitting methods, we've opted for the regular expression match approach. This choice offers the advantage of specifying the desired tokens in a manner analogous to the provided image and is notably straightforward.

The "Splitter" component returns a list of matched strings.

To facilitate subsequent use, a Token class is established to store both the name and type of tokens.



