

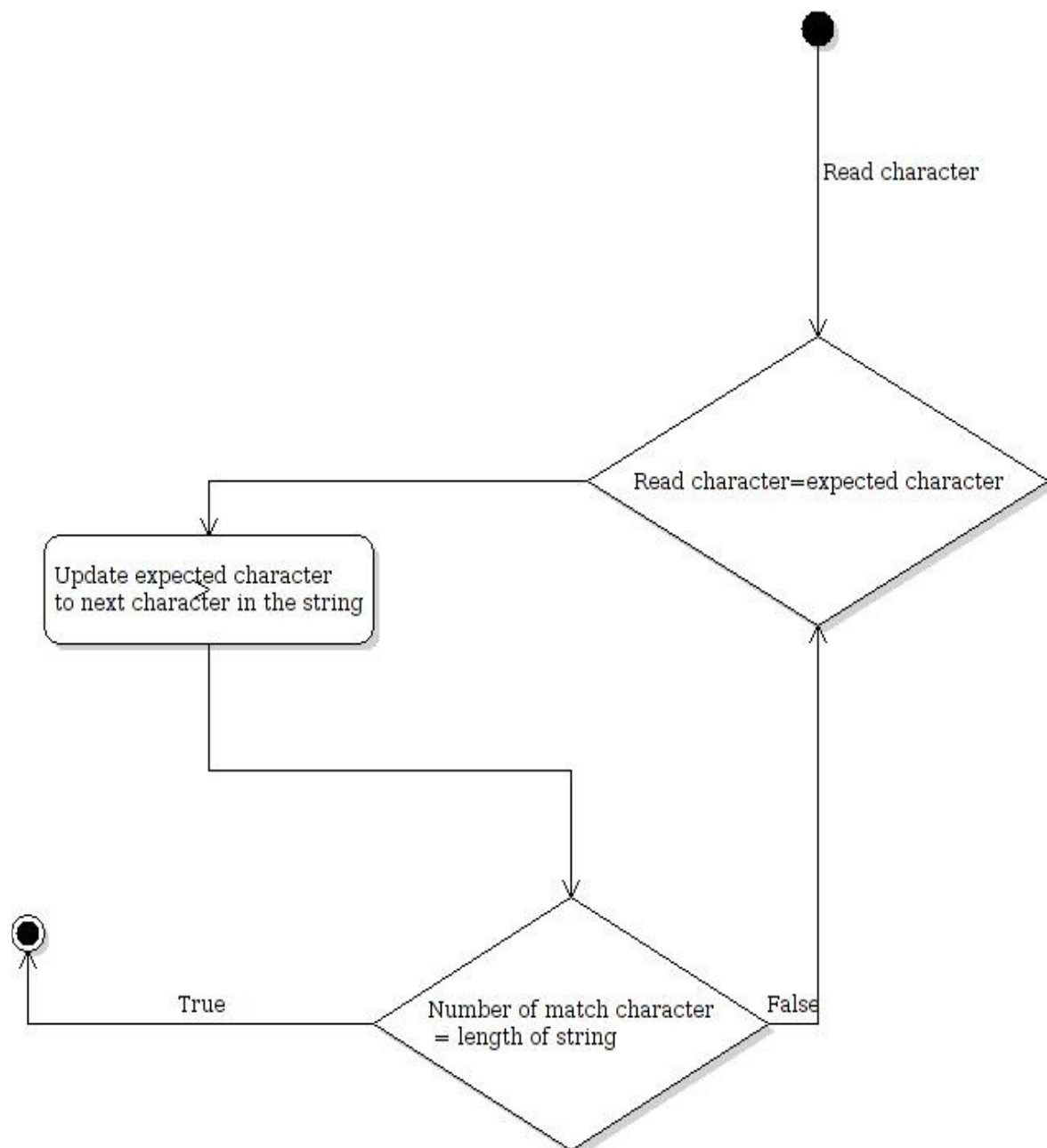
The problem set was to build a parser that would search for the string “hello” in a character stream

Approach

Initial we need to look for the first character of the string in the character stream. If it is found then we look for the next character. If we found a mismatch we move on to next character.

Now suppose we found a mismatch we need to reset the state to initial. That is from now on we will look for the first character in the stream

Now suppose N is length of string and we have found N matching characters we are done and we exit.



Implementation

Class wordParser

Methods : `bool parseForHello(char c)`

Returns true if after reading this character we have found a matching string

Variables : `char currState`

Holds the next expected character to look for in the input stream

`int parseLength`

Length of the matched characters so far. If this becomes equal to length of input stream then we found a matching string