Pattern Occurrence Algorithm Documentation

Algorithm Step:

1. Initialize a counter, `count`, to zero. This variable will keep track of the number of occurrences of the pattern in the text
2. Calculate the length of the pattern and store it in `pattern_length` .
3. Iterate through the text with a for-loop. The loop variable is .
4. The loop starts at the beginning of the text (`i=0`) and stops when the remaining characters in the text are fewer than the length of the pattern. This is because, beyond this point, a match is impossible.
5. For each iteration, extract a substring from the main text starting at position `i` with a length of **`pattern_length`**.
6. Within each iteration of the loop, compare the extracted substring to the pattern.
7. If the substring matches the pattern, increment the **`count`** by 1.
8. Once the loop has finished iterating through the text, return the value of **`count`** as the total number of occurrences of the pattern in the text.