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FIT3155 Assignment 1

Question\_2

In this question, some pre-processing is used for the pattern. The bad character shift rule (assuming there is only a lowercase letter alphabet), the good suffix shift rule, and the matched prefix shift.

So for the Boyer-Moore with wildcard, there will be only one wildcard in the pattern so for the checking state of the current pointer gets a wildcard it will be recorded for the usage of the shifting.

For the shift, if the pointer at the pattern hasn't gone through the wild card the shift will get we will see if the wild card is before the bad character shift if it is we will shift to the wild card instead of the bad character.

In the case of the matched prefix if the wild card is used for the matched prefix and the Galil optimization will stop at some wrong letter as it is matched with a wild card and this will cause a false positive of matches.