KMP's main idea

string= "abcxabcdabxabcdabcdabcy"

⇒ No match

pattern= "abcdabcy"

No suffix equals to prefix

go back and start from the beginning of the pattern

string= "abcxabcdabxabcdabcdabcy"

⇒ No match

pattern= "abcdabcy"

we have a prefix and suffix "ab"

go back and start from the beginning of the pattern

string= "abcxabcdabxabcdabcdabcy"

⇒ No match

pattern= "abcdabcy"

No suffix equals to prefix

go back and start from the beginning of the pattern

string= "abcxabcdabxabcdabcdabcy"

⇒ No match

pattern= "abcdabcy"

we have a prefix and suffix "abc"

go back and start from the beginning of the pattern

string= "abcxabcdabxabcdabcdabcy"

match

pattern= "abcdabcy"

miro