**INTRODUCTION**

The KMP algorithm searches a word in a large text by creating a pattern table that stores the longest prefix of the word being searched. The algorithm searches comparing character by character and if a mismatch occurs, it uses the preprocessed pattern table to skip characters comparing during matching.

**Use Cases**

The algorithm is used in several areas:

1. Searching pattern in text.
2. Determining whether files of a high level language are syntactically correct e.g when a some text or code is opened from a different editor.
3. Web browsers search engines.

**Insights**

The algorithm is faster in execution compared to other algorithms. It has a time complexity of O(n) where n is the length of the word being searched.