

5.3- What do you mean by regular expression?
Also give an example.

Answer

Regular expression \rightarrow Is a sequence of characters that define a search pattern. Usually such patterns are used by string searching algorithms for "find" or "find and replace" operations on strings or for input validation. It is a technique developed in theoretical computer science and formal language theory.

The concept arose in the 1950s when the American mathematician Stephen Cole Kleene formalized the description of a regular language. The concept came into common use with word processing utilities. Different syntaxes for writing regular expressions have existed since the 1980s, one being the POSIX standard and another, widely used, being the Perl syntax.

Regular expressions are used in search engines, search engine, search and

replace dialogs of word processors and text editors. In text editors, in text processing utilities such as sed and awk and many programming language provide regex capabilities either built-in or via libraries.

Example #1 `[.at]` matches any three

character string ending with "at" including "hat", "cat" and "bat".

#2 `[hc]at` matches "hat" and "cat".