**Java Regular Expressions (java regex) Tutorial with examples**

**Regular expressions** are used for defining String patterns that can be used for searching, manipulating and editing a text. These expressions are also known as **Regex** (short form of Regular expressions).

The java.util.regex API (the package which we need to import while dealing with Regex) has two main classes:

1. java.util.regex.Pattern – Used for defining patterns

2) java.util.regex.Matcher – Used for performing match operations on text

using patterns.

## **Java Regex Package**

The java.util.regex package consists of three classes: Pattern, Matcher and PatternSyntaxException:

* Pattern object is a compiled regex. The Pattern class provides no public constructors. To create a pattern, we must first invoke one of its public static compile methods, which will then return a Pattern object. These methods accept a regular expression as the first argument.
* Matcher object interprets the pattern and performs match operations against an input String. It also defines no public constructors. We obtain a Matcher object by invoking the matcher method on a Pattern object.
* PatternSyntaxException object is an unchecked exception that indicates a syntax error in a regular expression pattern.