Groups and Ranges

The groups and ranges in the regular expression define the collection of characters enclosed in the brackets.

Characters	Description	Example
()	It is used to match everything which is in the simple bracket.	A(xy) is an expression which matches with the following string: "Axy"
{ }	It is used to match a particular number of occurrences defined in the curly bracket for its left string.	<pre>xz{4,6} is an expression which matches with the following string: "xzzzzz"</pre>
[]	It is used to match any character from a range of characters defined in the square bracket.	xz[atp]r is an expression which matches with the following strings: "xzar", "xztr", and "xzpr"
[pqr]	It matches p, q, or r individually.	Following strings are matched with this expression: "p", "q", and "r".
[pqr][xy]	It matches p, q, or r, followed by either x or y.	Following strings are matched with this expression: "px", "qx", and "rx", "py", "qy", and "ry".
(?:)	It is used for matching a non-capturing group.	A(?:nt pple) is an expression which matches to the following string: "Apple"
[^]	It matches a character which is not defined in the square bracket.	Suppose, Ab[^pqr] is an expression which matches only the following string: "Ab"
[a-z]	It matches letters of a small case from a to z.	This expression matches the strings such as: "a", "python", "good".
[A-Z]	It matches letters of an upper case from A to Z.	This expression matches the strings such as: "EXCELLENT", "NATURE".
^[a-zA-Z]	It is used to match the string, which is either starts with a small case or upper-case letter.	This expression matches the strings such as: "A854xb", "pv4fv", "cdux".
[0-9]	It matches a digit from 0 to 9.	This expression matches the strings such as: "9845", "54455"
[aeiou]	This square bracket only matches the small case vowels.	-
[AEIOU]	This square bracket only matches the upper-case vowels.	-
ab[^4-9]	It matches those digits or characters which are not defined in the square bracket.	This expression matches those strings which do not contain 5, 6, 7, and 8.