Regular Expressions

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| Sr. No | Regex | Explanation |
| 1 | Asterisk \* | **Zero or More** means a character will occur zero or many times. For example, ha\*t, the character ‘a’ will occur zero or many times in between h and t such as hat, haat, haaat, ht, |
| 2 | Plus + | **One or More** means a character will occur one or more times. For example, ha+t, the character ‘a’ must occur once or more times such as hat, haat, haaat and not ht as character ‘a’ should occur once or more and in ‘ht’ there isn’t any character a. |
| 3 | ? | **Zero or one** means that the character is either optional or occurred only once such as ha?t can be as ht, hat but not haat as ‘a’ should be repeated zero or one time ony |
| 4 | . | **Matches any single character in place of the dot** such as ‘.at’ will matches bat, cat, mat, oat as all the four words ends at ‘at’ preceded by the ‘.’ Regular expression |
| 5 | [a-z] | **Matches any lowercase letter from a to z in the given input string.** For example, the input string is “Hello World” and regex is [a-z] so answer will be “ello orld” or 8 matches found as lower case letters from a –z |
| 6 | [A-Z] | **Matches any uppercase letters from A to Z in the given input string.** So in the Sr. No 5 example, the matches will be “H” & “W” only equals 2 matches. |
| 7 | [0-9] | **Matches digits only.** For example, the input string is “Hello World 1234”, so matches will be 1234 |
| 8 | [abc] | **Matches any of the character in the regex.** For example, the regex is [aeiou] and the input string is “Hello World” so matches are ‘e o o’ as regex is [aeiou] and only ‘e’ and ‘o’ matches in the given string against the regex |
| 9 | [^abc] | **Matches all others except the abc.** This is inverse or opposite of the Sr. No 8, so in case of [^aeiou] against the input string “Hello World”, the matches will be “Hll Wrld” |
| 10 | a{2,4} | **Matches 2 to 4 consecutive ‘a’ characters** such as aa, aaa, aaaa |