**What is a Regular Expression?**

A regular expression is a sequence of characters that forms a search pattern. When you search for data in a text, you can use this search pattern to describe what you are searching for.

A regular expression can be a single character, or a more complicated pattern

Syntax

In PHP, regular expressions are strings composed of delimiters, a pattern and optional modifiers.

**$exp = "/w3schools/i";**

Regular Expression Functions

PHP provides a variety of functions that allow you to use regular expressions.

**The most common functions are:**

**Function Description**

**preg\_match()**  Returns 1 if the pattern was found in the string and 0 if not

**preg\_match\_all()** Returns the number of times the pattern was found in the string, which may also be 0

**preg\_replace()** Returns a new string where matched patterns have been replaced with

another string

**preg\_match()**

$str = " Returns a new string where matched patterns have been replaced with

another string ";

$pattern = "/ string /i";

echo preg\_match($pattern, $str);

**preg\_match\_all()**

$str = "The rain in SPAIN falls mainly on the plains.";

$pattern = "/ain/i";

echo preg\_match\_all($pattern, $str);

**preg\_replace():**

preg\_replace() function will replace all of the matches of the pattern in a string with another string.

$str = "Visit Microsoft! Microsoft!";

$pattern = "/microsoft/i";

echo preg\_replace($pattern, "W3Schools", $str);

// Input string

$text = "The quick brown fox jumps over the lazy dog. The lazy dog barks.";

// Pattern to match: "lazy"

$pattern = "/lazy/";

// Replacement string

$replacement = "active";

// Perform the replacement with no limit

$result = preg\_replace($pattern, $replacement, $text);

// Output the result

echo $result;