

Web Programming LAB

Discussion lec 4

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رابع معلومات مسائي

Q1/ What is a regular expression and how is it used in PHP?

Sol / 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.

In PHP, regular expressions are commonly used with functions that provide pattern matching capabilities, such as `preg_match()`, `preg_replace()`, and `preg_split()`. These functions allow you to search, replace, and split strings using regular expressions.

Q2/ What are some of the most commonly used regular expression functions in PHP, and what do they do?

Sol / `preg_match()`: This function is employed for conducting a pattern match on a given string. It yields a true value if the specified pattern is located within the string; otherwise, it returns false. Its primary application is in searching for patterns within strings.

`preg_replace()`: This function serves the purpose of executing a search and replace operation through the utilization of regular expressions. It scans a string for a specified pattern and substitutes it with a designated value.

`preg_split()`: This function is utilized to fragment a string into an array of substrings based on a defined pattern. It divides the string at every instance where the specified pattern is encountered.

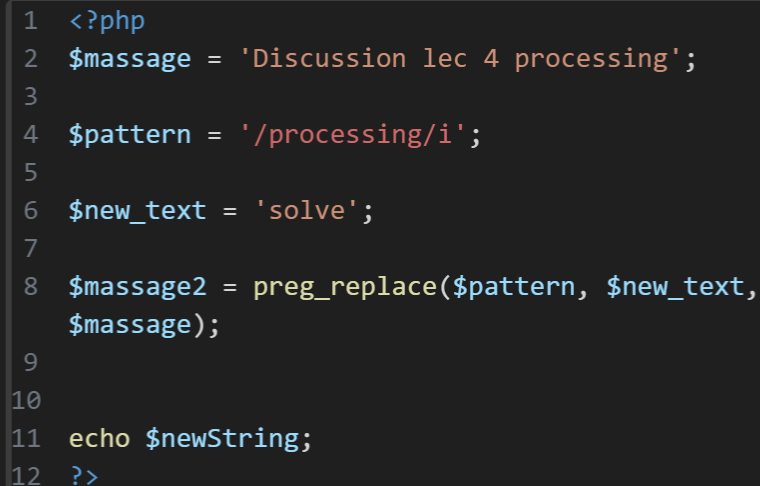
`preg_match_all()`: Similar to `preg_match()`, this function identifies all occurrences of a pattern within a string rather than just the initial one. It provides the count of matches found.

Q3/ What is the difference between the `preg_match()` and `preg_match_all()` functions?

Sol / `preg_match()` stops after finding the first match, while `preg_match_all()` continues searching for all occurrences of the pattern in the given string. Choose the appropriate function based on whether you need only the first match or all matches.

Q4/ How do you use regular expressions to search and replace text in PHP? Give a code example.

Sol /



```
1  <?php
2  $message = 'Discussion lec 4 processing';
3
4  $pattern = '/processing/i';
5
6  $new_text = 'solve';
7
8  $message2 = preg_replace($pattern, $new_text,
9  $message);
10
11  echo $newString;
12  ?>
```