

Read this first:

String means sequence of character. In PHP, there is no any separate data type to store character data. Single and multiple character set both are treated as string data types. We can denotes string in either " " or ' '.

" " and ' ' string in PHP

In PHP, string can be defined in both ways either with " " or with ' '. Both notation are correct for defining a string. The only difference is when we define a variable in single quote string (' ') it will be interpreted as normal character, while in double quote string (" ") variable is interpreted with its value.

For example;

```
<?php
    $age = 25;

    echo "Mr. Pratik is $age years old "; //here $age is replaced with 20
    echo 'Mr. Pratik is $age years old'; // here $age is printed as $age
?>
```

CONCAT string in PHP using . (period)

We can concat two string using period [.] in php.

```
<?php
    $a = "hello";
    $b = "world";

    echo $a." ".$b; //return hello world
?>
```

STRING FUNCTIONS

Strlen()

```
strlen(string);
```

This function returns integer value for length of string.

```
<?php
    $str = "Hello World";
    echo strlen($str); //returns 11
?>
```

Strrev()

```
strrev(string);
```

This function returns a string in reverse order of existing string.

```
<?php
    $str = "Hello World";
    echo strrev($str); //returns dlrow olleH
?>
```

Strtolower()

```
strtolower(string);
```

This function returns a string in lower case of original string.

```
<?php
    $str = "Hello World";
    echo strtolower($str); //returns hello world
?>
```

Strtoupper()

strtoupper(*string*);

This function returns a string in upper case of original string.

```
<?php
    $str = "Hello World";
    echo strtoupper($str); //returns HELLO WORLD
?>
```

ucfirst()

ucfirst(*string*);

Convert the first character of string in upper case. (Rest of all character will be unchanged)

```
<?php
    $str = "india is best country.";
    echo ucfirst($str); //returns India is best country.
?>
```

ucwords()

ucwords(*string*);

Convert the first character of each string in upper case. (Rest of all character will be unchanged)

```
<?php
    $str = "india is best country.";
    echo ucwords($str); //returns India Is Best Country.
?>
```

trim()

`trim(string);`

It removes the white space from both side of string.

```
<?php
    $str = "  india is best country.  ";
    echo trim($str); //returns india is best country. (without white space)
?>
```

rtrim()

`rtrim(string);`

It removes the white space from right side of string.

```
<?php
    $str = "  india is best country.  ";
    echo rtrim($str); //returns    india is best country.
?>
```

ltrim()

`ltrim(string);`

It removes the white space from left side of string.

```
<?php
    $str = "  india is best country.  ";
    echo ltrim($str); //returns india is best country.
?>
```

Str_word_count()

Str_word_count(*string*);

This function counts the number of words in a string.

```
<?php
    $str = "india is best country.";
    echo str_word_count($str); //returns 4
?>
```

Str_split()

Str_split(*string*);

This function breaks strings into character and returns the array of character.

```
<?php
    $str = "Hello World";
    echo str_split($str); //returns array of each words
?>
```

Substr()

Substr(*string,offset,length*);

This function returns a substring starting from specific position (offset) to given length. Length is optional. Negative number for *offset* and *length* indicates start from end of the string.

```
<?php
    $str = "Hello World";
    echo substr($str,3,4); //returns lo W
?>
```

Str_replace()

`Str_replace(search word,new word,string);`

This function replaces a specific word with new word in string. (case sensitive)

```
<?php
    $str = "India is my country";
    echo str_replace("my","best",$str); //returns India is best country
?>
```

Use **str_ireplace()** for case insensitive search and replace.

Strcmp()

`Strcmp(string 1, string 2);`

This function will compare two strings and return integer value. (case sensitive)

- 0 - if the two strings are equal
- <0 - if string1 is less than string2
- >0 - if string1 is greater than string2

```
<?php
    $str1 = "India is my country";
    $str2 = "India is my country!!!";
    echo strcmp($str1, $str2); //returns <0 as string 1 is less than string 2
?>
```

Use **strcasecmp ()** for case insensitive comparison.

Str_shuffle()

`Str_shuffle(string);`

The `str_shuffle()` function randomly shuffles all the characters of a string.

```
<?php
    $str = "India is my country";
    echo str_shuffle($str); //returns any new combination every time.
?>
```

implode()

`implode(separator, array);`

The `implode()` function returns a new string from given array. It will create a string from array members separated by given separator.

```
<?php
    $arr = array("India", "is", "my", "country");
    echo implode(" ", $arr); //returns India is my country
?>
```

explode()

`explode(separator, array);`

The `explode()` function do exactly reverse operation of `implode()` and returns a array of words from given string. It breaks the string in different words with given separator.

```
<?php
    $str = "India is best country";
    echo explode(" ", $str); //returns a array of words
?>
```

Remember:

' ' (single quote) string cannot interpret the value of variable. It will just print the name of variable as it is. Like; `<?php $a = 10; echo 'Value is $a' ?>` prints **Value is \$a** on screen.

" " (double quote) string can interpret the value of variable and print value of variable on screen. But if we want to print name of variable on the screen with double quote we need to use character \ before \$. Like; `<?php $a = 10; echo "The variable \$a has value $a" ?> ?>` prints **The variable \$a has value 10** on screen.

When we use negative value for *offset* in `substr()` it start at the end of string but when we use negative value in *length* parameter, it will exclude number of characters at the end of the string.

`substr_replace()` used to replace the string from specific offset.

`Substr_replace(string, new string, offset)`

Answer below questions:

What does negative value of *length* exactly doing in `substr()`?

How can you extract each word from a string?

Write output for following scripts:

1. `<?php echo substr("Hello world",-4); ?>` _____

2. `<?php echo substr("Hello world",-5,-2); ?>` _____

3. `<?php echo substr("Hello world",3,-2); ?>` _____

4. `<?php echo substr_replace("hello world", "", -1); ?>` _____

5. `<?php $a = "hello"; $b = "world";
$a.=$b; echo $a; echo "
"; echo $b; ?>` _____

Lab Assignment

Perform various string operating according to user's choice. (see the below UI)

String Operation

String:

hELLO IndiAAAA

Generate

Choice	Function Name	Description	Output
	Original Text	This is orignal text	hELLO IndiAAAA
<input checked="" type="checkbox"/>	strlen	returns length of string	14
<input type="checkbox"/>	strrev	returns reverse string of the original string	Not Selected
<input checked="" type="checkbox"/>	str_shuffle	rearrange the all characters of the original string	AhL LAIIndAEoA