

String in PHP

Formatting

Joining and Splitting

Comparing

Substring



Who should watch this video?

CS Students

Industry Beginners

Any Learner Interested in Web Development

What is String?

Stream of characters

“This is a PHP Lecture”

“Hello friends”

“520”

“500.25\$”

“user@123”

“google.com”



Length of a String : strlen(str)

- echo strlen("I love coding");
- 13



Formatting String

- chop()
- trim()
- rtrim()
- ltrim()



trim()

```
trim ( string $str [, string $character_mask = "  
    \t\n\r\0\x0B" ] ) : string
```

This function returns a string with whitespace stripped from the beginning and end of str.

Without the second parameter, trim() will strip these characters

- " " (ASCII 32 (0x20)), an ordinary space.
- "\t" (ASCII 9 (0x09)), a tab.
- "\n" (ASCII 10 (0x0A)), a new line (line feed).
- "\r" (ASCII 13 (0x0D)), a carriage return.
- "\0" (ASCII 0 (0x00)), the *NUL*-byte.
- "\x0B" (ASCII 11 (0x0B)), a vertical tab.

Coding trim()

ltrim()

```
<?php  
text = "\t\tThese are a few words :) ... ";  
$trimmed = trim($text);  
echo $trimmed;?
```

rtrim()

```
>  
"These are a few words :) ..."
```


nl2br()

Replace all new lines with `
` tag of HTML

Useful for echoing a long string to browser

```
<?php  
echo nl2br("foo isn't\n bar");  
?>
```

```
foo isn't<br />  
bar
```

String Formatting for Printing

- `printf()`
 - Print it to browser or prompt
 - `printf (string $format [, mixed $...]) : int`
- `sprintf()`
 - Returns a formatted string
 - `sprintf (string $format [, mixed $...]) : string`

printf()

```
<?
```

```
php$name = Raman";
```

```
printf("Hi %s",$name);
```

```
echo "Hi $name";
```

```
?>
```

- %s
- Called **conversion specification**
- %['padding character'] [-] [width] .[precision] type
- Optional : padding character , [-]
- '(char)Pads the result with the character (char).
- Default padding : space

%[' padding character] [-] [width] .[precision] type

```
1 <?php
2
3 $var = 66.33;
4 $price = 20;
5 $percentage = 30;
6 printf("hello %0-9.3f",$var);
7 printf("\nhello %09.3f",$var);
8 printf("\nprice is %'$-9.2f and percentage is %.2d  %",$price , $percentage);
9 ?>
10 |
```

hello 66.330000

hello 00066.330

price is 20.00\$\$\$\$ and percentage is 30 %

Conversion Specification Type Codes

Specifier	Description
b	Interpret as an Integer and print as a binary
c	Interpret as an Integer and print as a character
d	Interpret as an Integer and print as a decimal char
f	Interpret as an double and print as a floating point number
o	Interpret as an integer and print as a octal number
s	Interpret as an string and print as a string
u	Interpret as an integer and print as a unsigned decimal

Try this



```
<?php
$s = 'monkey';
$t = 'many monkeys';
printf("[%s]\n", $s); // standard string output
printf("[%10s]\n", $s); // right-justification with spaces
printf("[% -10s]\n", $s); // left-justification with spaces
printf("[%010s]\n", $s); // zero-padding works on strings too
printf("[%'#10s]\n", $s); // use the custom padding character '#'
printf("[%10.9s]\n", $t); // right-justification but with a cutoff of 8 characters
printf("[% -10.9s]\n", $t); // left-justification but with a cutoff of 8 characters
?>
```

Argument Numbering

- `$key = 66.33;`
- `$val = 98.56;`
- `printf("\nval is %2$.2f and key = %1$.2f", $key, $val);`
- output:
- Key is 98.56 and val = 66.3

String Case Functions

Try this



- `strtoupper()`
- `strtolower()`
- `ucfirst()`
- `ucword()`

Formatting String for Storage

- `addslashes()`
- `stripslashes()`
- Problematic : Quotation single (') and double ("), backslash (\), NULL character

```
$str = "O'Reilly?";  
echo addslashes($str);
```

O'Reilly?

Joining and Splitting Strings

- `explode()`
- `implode`
- `join()`

explode()

```
1. $email = explode("@", ram@gmail.com");
2. print_r($email);
```

output:

Array

```
(
  [0] => ram
  [1] => gmail.com
1. )
```

```
1. <?php
2. $temp = explode('#', "57012#Mr. Rajesh
   Sharma#M#20");
3. print_r($temp);
4. ?>
```

```
Array (
  [0] => 57012
  [1] => Mr. Rajesh Sharma
  [2] => M
  [3] => 20
)
```

implode() and join()

- `echo implode('@',array("ram","gmail.com")); #this is email array`
- output:
- `ram@gmail.com`

- `$array_name=array('First Name', 'Middle Name', 'Last Name');`
- `$join_string = implode("-", $array_name);`
- `echo $join_string;`

- `First Name-Middle Name-Last Name`

join()

- echo **join**(' @',array("ram","gmail.com")); #this is email array
- ram@gmail.com

strtok() vs explode()

- **Strtok()** get tokens one at a time
- **Explde()** get all tokens at one time

1. `$address = '485,Raj Nagar,Delhi-110093';`
2. `$token = strtok($address, ",");`
3. `while($token != ""){`
4. `echo $token."\n";`
5. `$token = strtok(",");`
6. `}`

```
output
485
Raj Nagar
Delhi-110093
```

`empty()` : to check field is empty or not

- `echo empty($address)? 'empty':'fill';`
- output: fill



substr(str, start,[length])

1. echo **substr**('abcdefgh',1,4);
2. echo "\n";
3. echo **substr**('abcdefgh',-1);
4. echo "\n";
5. echo **substr**('abcdefgh',-3);
6. echo "\n";
7. echo **substr**('abcdefgh',2,-2);

output:

- bcde
- h
- fgh
- cdef

Comparing Strings

- `==`
- `strcmp (string $str1 , string $str2) : int`
- `strcasecmp()`
- `strnatcmp()`

- Used in sorting
- Lexicographic and Natural Ordering

strcmp (string \$str1 , string \$str2) : int

- Returns `< 0` if str1 is less than str2
- `> 0` if str1 is greater than str2,
- and `0` if they are equal
- `<?php`

```
$var1 = "Hello";
```

```
$var2 = "hello";
```

```
if (strcmp($var1, $var2) !== 0) {
```

```
    echo '$var1 is not equal to $var2 in a case sensitive string comparison';
```

```
}
```

```
?>
```

Strcmp()

- <?php
- echo strcmp("A","B");
- echo "\n";
- echo strcmp("B","A");
- echo "\n";
- echo strcmp("COVID-19","COVID-19");
- ?>

- -1 1 0

strnatcmp()

- `strcmp()` : “2” and “12” ; “2” is greater

```
<?php
$arr1 = $arr2 = array("img12.png", "img10.png", "img2.png", "img1.png");
echo "Standard string comparison\n";
usort($arr1, "strcmp");
print_r($arr1);
echo "\nNatural order string comparison\n";
usort($arr2, "strnatcmp");
print_r($arr2);
?>
```

Standard string comparison

Array

```
(
    [0] => img1.png
    [1] => img10.png
    [2] => img12.png
    [3] => img2.png
)
```

Natural order string comparison

Array

```
(
    [0] => img1.png
    [1] => img2.png
    [2] => img10.png
    [3] => img12.png
)
```

Finding String in a String

- `strstr()` and `strchr()` : Identical
- `stristr()` : Identical to `strstr()` but not case sensitive

strstr()

```
1 <?php
2 $email = 'name@example.com';
3 $domain = strstr($email, '@');
4 echo $domain; // prints @example.com
5
6 $user = strstr($email, '@', true); // As of PHP 5.3.0
7 echo $user; // prints name
8 ?>
```

Finding position in a String

- strpos()
 - strrpos()
 - <?php
 - echo strpos("hello mr lambda","l");
 - echo "\n";
 - echo strchr("hello mr lambda","l");
 - echo "\n";
 - echo strrpos("hello mr lambda","l");
 - ?>
- 2
 - llo mr lambda
 - 9

`str_replace (mixed $search , mixed $replace , mixed $subject [, int &$count]) : mixed`

```
// Provides: <body text='black'>
$bodytag = str_replace("%body%", "black", "<body text='%body%'>");

// Provides: Hll Wrld f PHP
$vowels = array("a", "e", "i", "o", "u", "A", "E", "I", "O", "U");
$onlyconsonants = str_replace($vowels, "", "Hello World of PHP");

// Provides: You should eat pizza, beer, and ice cream every day
$phrase = "You should eat fruits, vegetables, and fiber every day.";
$healthy = array("fruits", "vegetables", "fiber");
$yummy = array("pizza", "beer", "ice cream");

$newphrase = str_replace($healthy, $yummy, $phrase);

// Provides: 2
$str = str_replace("ll", "", "good golly miss molly!", $count);
echo $count;
```


substr_replace (mixed \$string , mixed \$replacement
 , mixed \$start [, mixed \$length])

- echo **str_replace**("o","@","IWorkHardForYou");
 - echo "\n";
 - echo **substr_replace**("IWorkHard","#",5);
 - echo "\n";
 - echo **substr_replace**("IWorkHard","#",5,3)
-
- IW@rkHardF@rY@u
 - IWork#
 - IWork#d

Exercise

- Reverse a String
- Repeat a String specific no of times
- Write a code to find a occurrence of a particular word in a document. i.e you have twits of last day and you have to find out how many news for covid-19. Then you can search few keywords in twitter database i.e. covid-19, corona, corona-virus.
- String is Palindrome or not i.e. LIRIL is palindrome
- Sort an string Array using String Functions
- Add words in a Array similar to dictionary

Thank You

