

# PHP – How to Loop through Characters in String?

## PHP – Loop through Characters in String

To iterate over each character in a string, there are following two approaches.

### Approach 1: Using `str_split()` and `foreach`

1. Take a string.
2. Split the string into an array of characters using `str_split()` function.
3. Use a looping statement like `for` loop or `while` loop, to iterate over each of the element (character) in the array.

### Approach 2: Using `index` and `for` loop

1. Take a string.
2. Initialize index to 0.
3. Define `for` loop that iterates when the index is less than string length.
  1. Access character using string and index.

### Example : For Each Character in String using `str_split()` and `foreach`

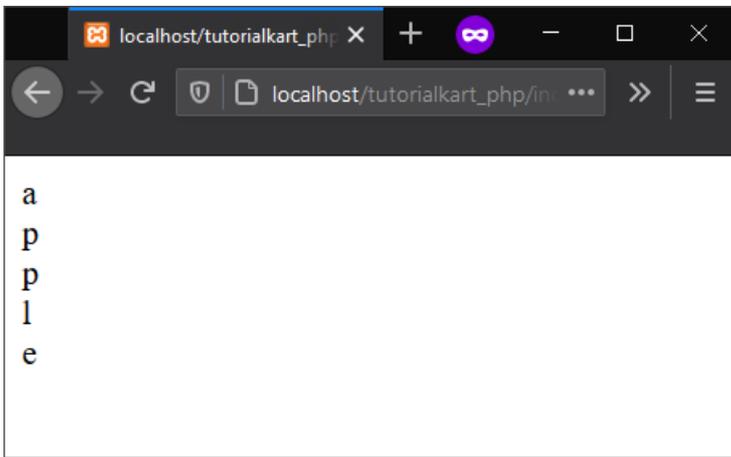
In this example, we will take a string, say “apple”, and iterate over each character of the string using `str_split()` function and `foreach` statement.

#### PHP Program

```
<?php
$str = "apple";
$chars = str_split($str);

foreach ($chars as $char) {
    echo $char;
    echo "<br>";
}
?>
```

#### Program Output



## Example : For Each Character in String using Index and For Loop

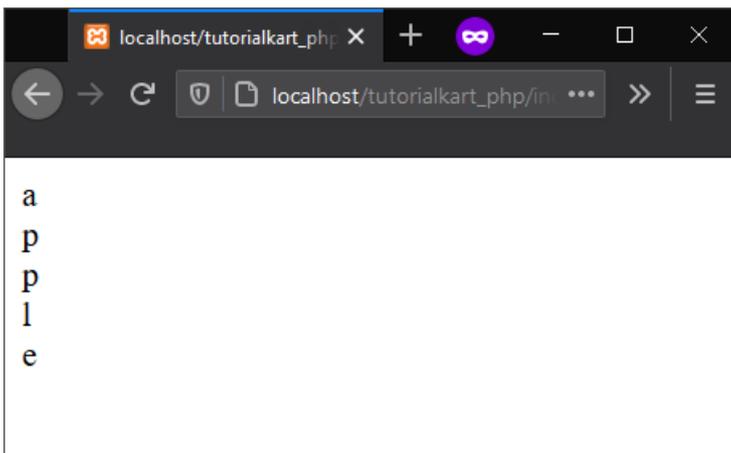
In this example, we will take a string, say “apple”, and iterate over each character of the string using index, that increments for each iteration, and for loop statement.

### PHP Program

```
<?php
$str = "apple";

$length = strlen($str);
for ($index = 0; $index < $length; $index++) {
    echo $str[$index];
    echo "<br>";
}
?>
```

### Program Output



## Conclusion

In this [PHP Tutorial](#), we learned how to iterate or loop for each character in a string, using different ways in PHP.

## PHP Tutorial

↳ [PHP Tutorial](#)

↳ [PHP Boolean](#)

↳ [PHP Integer](#)

↳ [PHP String](#)

## PHP Conditional Statements

↳ [PHP If](#)

↳ [PHP If AND](#)

↳ [PHP If OR](#)

↳ [PHP If NOT](#)

## PHP Loop Statements

↳ [PHP While](#)

## PHP Strings

↳ [PHP String Length](#)

↳ [PHP String - Count Number of Words](#)

↳ [PHP String Reverse](#)

↳ [PHP String - Loop through Characters](#)

↳ [PHP String - Loop through Words](#)

↳ [PHP Split String into Words](#)

## PHP Arrays

↳ [PHP Create Array](#)

↳ [PHP String Array](#)

↳ [PHP Array Notice Undefined Offset](#)

↳ [PHP Array Count](#)

↳ [PHP Array Foreach](#)