

Nizovi

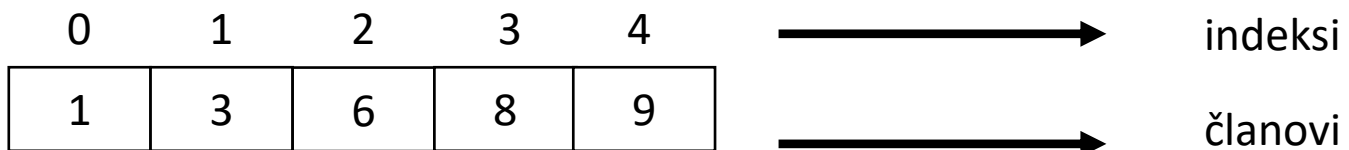
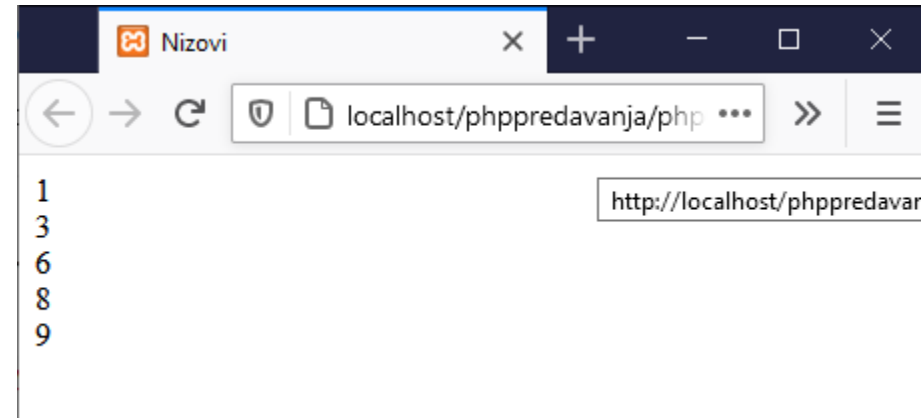
# Indeksirani nizovi

- Niz je promenljiva koja može čuvati više vrednosti
- Svaka promenljiva u nizu naziva se član niza
- Svim članovima niza može se pristupiti posredstvom indeksa
- Prvi član niza ima indeks 0
- Veličina niza nije fiksna kao u drugim jezicima

# Kreiranje niza

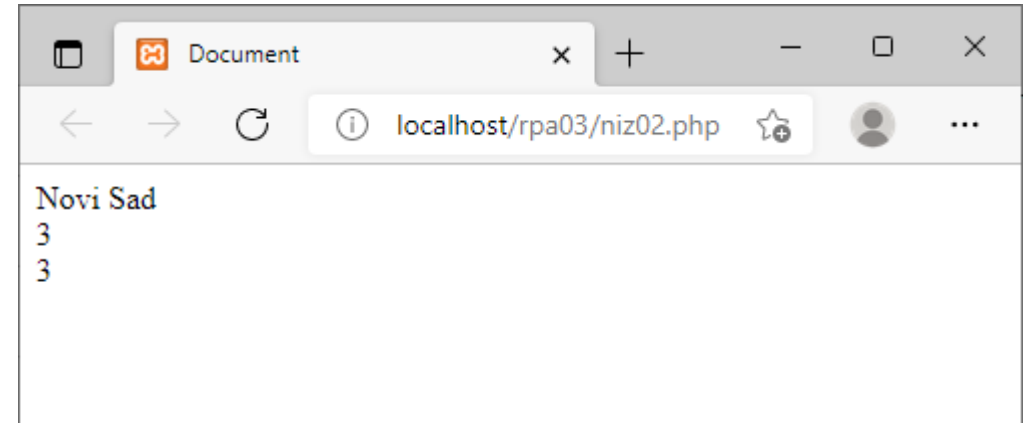
```
<?php
$a = array(1, 3, 6, 8, 9);
echo "$a[0] <br>";
echo "$a[1] <br>";
echo "$a[2] <br>";
echo "$a[3] <br>";
echo "$a[4] <br>";

?>
```



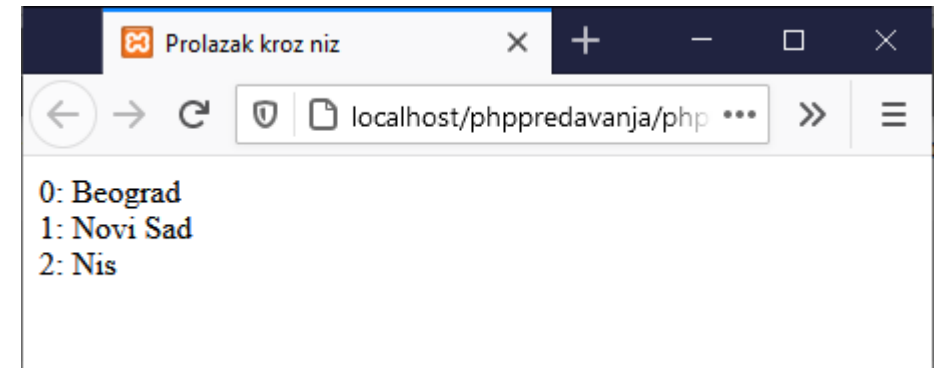
# Funkcija count() ili sizeof()

```
<?php
$a = array("Beograd", "Novi Sad", "Nis");
echo $a[1];
echo "<br>";
echo count($a);
echo "<br>";
echo sizeof($a);
?>
```



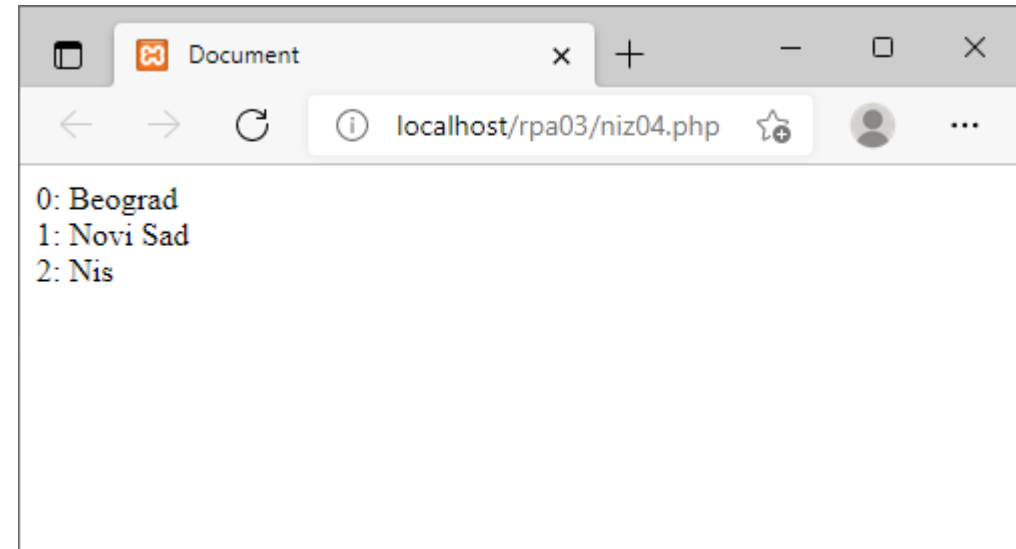
# Prolazak kroz niz for petljom

```
<?php  
  
$a = array("Beograd", "Novi Sad", "Nis");  
  
for ($i=0; $i < count($a) ; $i++) {  
    echo "$i: $a[$i]<br>";  
}  
  
?>
```



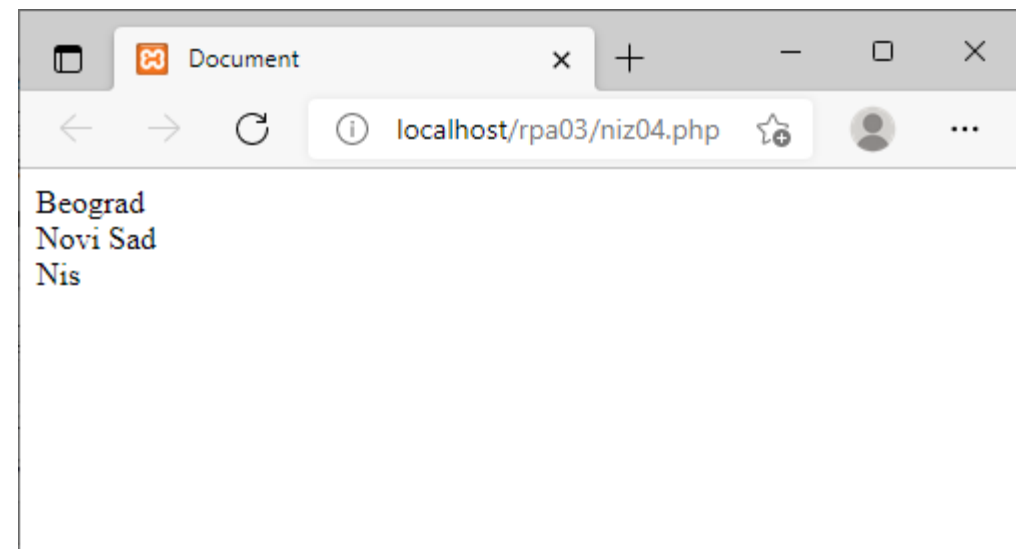
# Prolazak kroz niz foreach petljom

```
<?php
//foreach snippet
$a = array('Beograd', 'Novi Sad', 'Nis');
foreach ($a as $key => $value) {
    echo "$key: $value <br>";
}
?>
```



A screenshot of a web browser window. The address bar shows 'localhost/rpa03/niz04.php'. The page content displays the output of the first PHP snippet: '0: Beograd', '1: Novi Sad', and '2: Nis', each on a new line.

```
//fore snippet
foreach ($a as $clan) {
    echo $clan . "<br>";
}
```

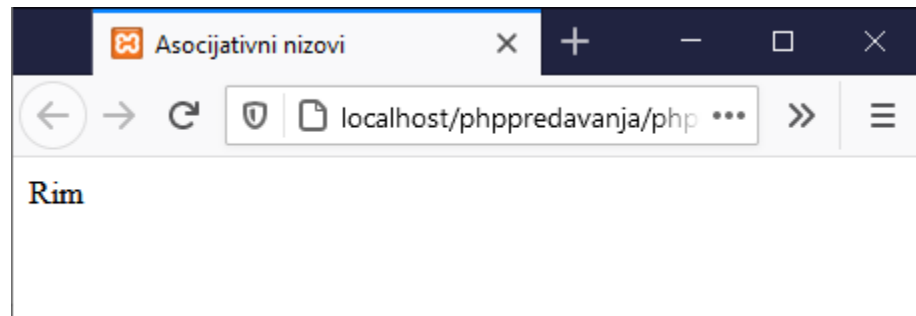


A screenshot of a web browser window. The address bar shows 'localhost/rpa03/niz04.php'. The page content displays the output of the second PHP snippet: 'Beograd', 'Novi Sad', and 'Nis', each on a new line.

# Asocijativni nizovi

- Članovi asocijativnog niza se identifikuju po ključu

```
<?php
$gradovi = array("Srbija"=>"Beograd", "Italija"=>"Rim", "Grcka"=>"Atina");
echo $gradovi["Italija"];
echo "<br>";
?>
```



# Prolazak kroz asocijativni niz foreach petljom

```
<?php
$gradovi = array("Srbija"=>"Beograd", "Italija"=>"Rim", "Grcka"=>"Atina");

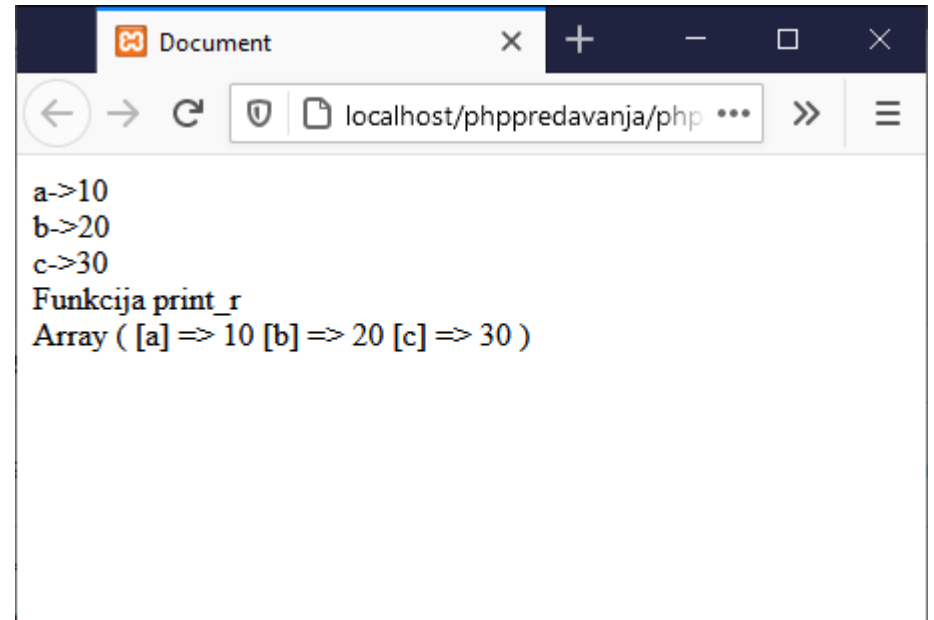
foreach ($gradovi as $key => $value) {
    echo $key . ":" . $value . "<br>";
}
?>
```



# Funkcija print\_r()

Funkcija print\_r() daje informacije o promenljivoj na čitljiv način.

```
<?php
$x = array("a" =>10 , "b"=>20, "c"=>30 );
foreach ($x as $key => $value) {
    echo $key . "->" . $value . "<br>";
}
echo "Funkcija print_r<br>";
print_r($x);
?>
```



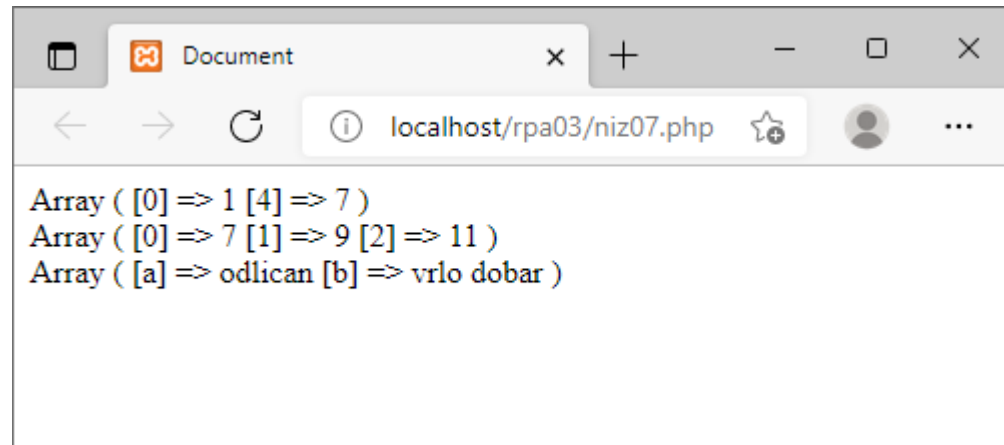
```
a->10
b->20
c->30
Funkcija print_r
Array ( [a] => 10 [b] => 20 [c] => 30 )
```

# Definisanje pojedinačnih članova niza

```
<?php
// definisanje po članu
$x[0]=1;
$x[4]=7;
print_r($x);
echo "<br>";

// bez indeksiranja
$a[] = 7;
$a[] =9;
$a[] = 11;
print_r($a);
echo "<br>";

$b['a'] = 'odlican';
$b['b']= 'vrlo dobar';
print_r($b);
echo "<br>";
?>
```

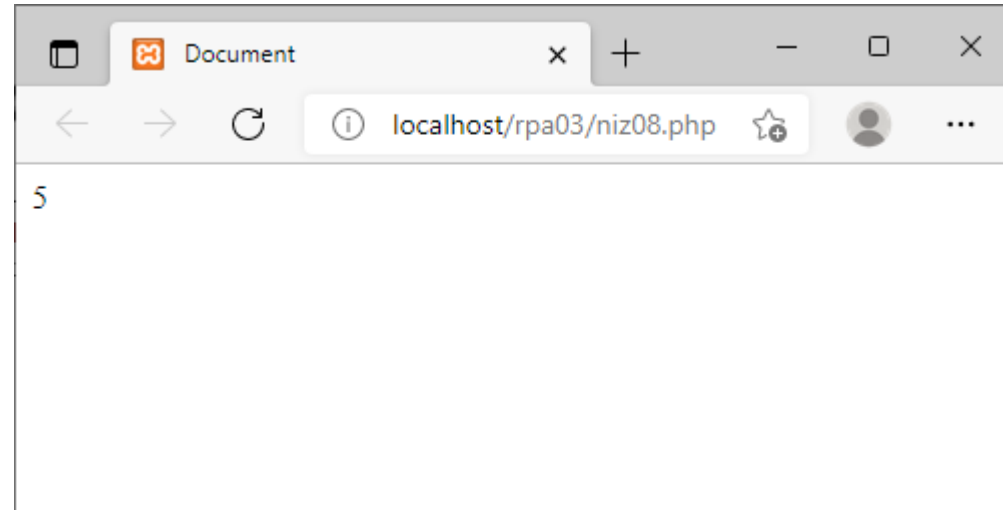


```
Array ( [0] => 1 [4] => 7 )
Array ( [0] => 7 [1] => 9 [2] => 11 )
Array ( [a] => odlican [b] => vrlo dobar )
```

# Dvodimenzionalni nizovi

```
<?php
$niz=array(
    array(1,2,3),
    array(2,4,5),
    array(6,7,8)
);
echo $niz[1][2];

?>
```

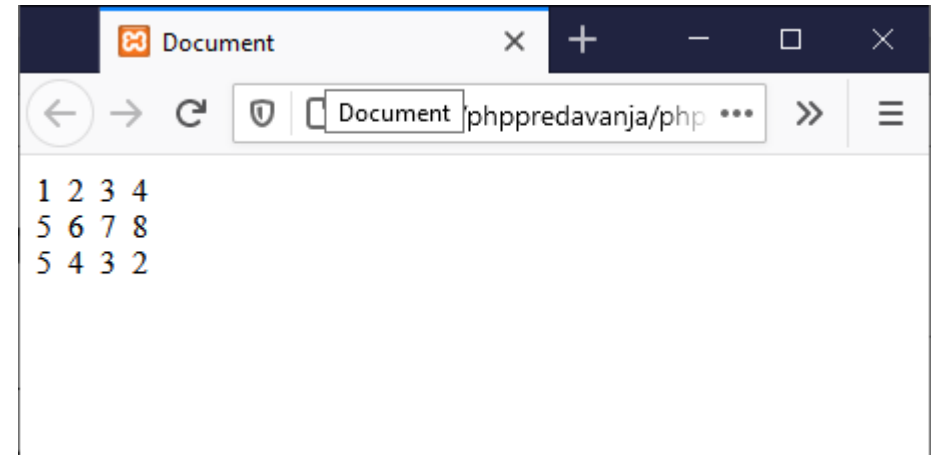


# Štampanje 2D niza

```
<?php
$x = array(
    array(1,2,3,4),
    array(5,6,7,8),
    array(5,4,3,2)
);

for ($i=0; $i < 3; $i++) {
    for ($j=0; $j < 4; $j++) {
        echo $x[$i][$j]. "&nbsp;&nbsp;&nbsp;";
    }
    echo "<br>";
}

?>
```



```
Document phppredavanja/php ...
1 2 3 4
5 6 7 8
5 4 3 2
```

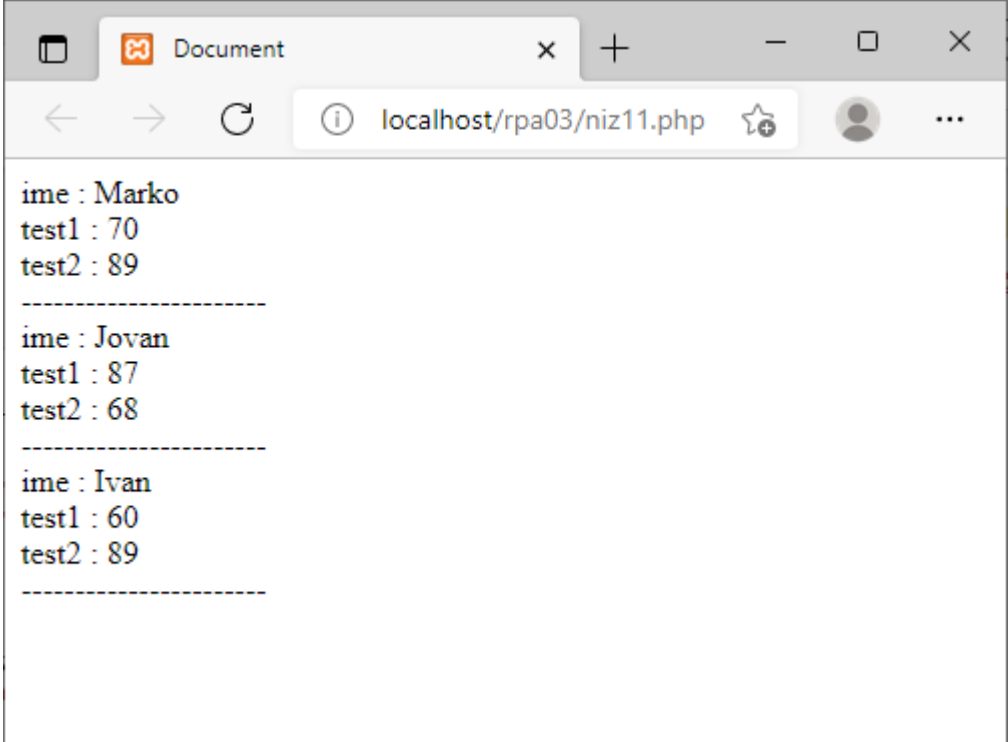
# Upotreba 2D niza

```
<?php
$x = array(
    array("Marko",70,89),
    array("Jovan",87,68),
    array("Ivan",60,89)
);

echo $x[0][0] . " Test1: " . $x[0][1] . " Test2: " . $x[0][2] . "<br>";
echo $x[1][0] . " Test1: " . $x[1][1] . " Test2: " . $x[1][2] . "<br>";
echo $x[2][0] . " Test1: " . $x[2][1] . " Test2: " . $x[2][2] . "<br>";
?>
```

```
<?php
$x = array(
    array("ime"=>"Marko", "test1"=>70, "test2"=>89),
    array("ime"=>"Jovan", "test1"=>87, "test2"=>68),
    array("ime"=>"Ivan", "test1"=>60, "test2"=>89)
);

foreach ($x as $osoba) {
    foreach ($osoba as $key => $value) {
        echo "$key : $value <br>";
    }
    echo "-----<br>";
}
?>
```



```
ime : Marko
test1 : 70
test2 : 89
-----
ime : Jovan
test1 : 87
test2 : 68
-----
ime : Ivan
test1 : 60
test2 : 89
-----
```

# Poništavanje niza ili člana niza

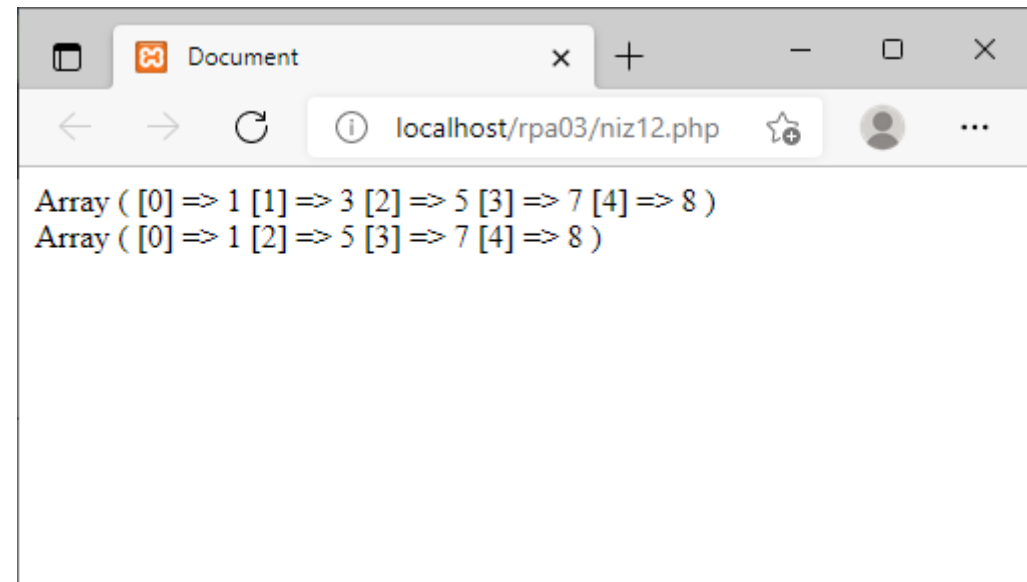
```
<?php
$x = array(1,3,5,7,8);
print_r($x);
echo "<br>";

//unisti varijablu $x
unset($x);
print_r($x);
?>
```

```
<?php

$x = array(1,3,5,7,8);
print_r($x);
echo "<br>";

//unisti varijablu $x[1]
unset($x[1]);
print_r($x);
?>
```

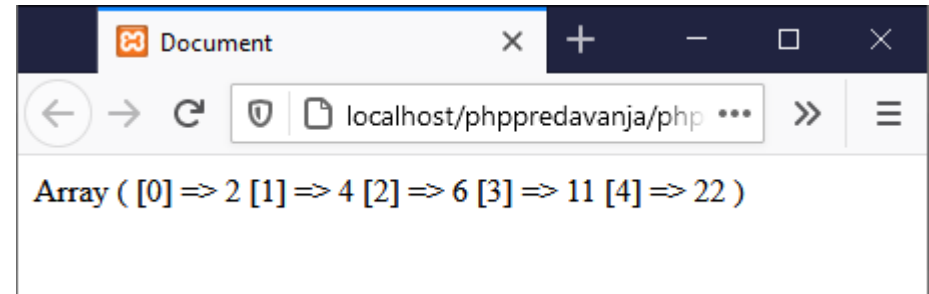


```
Array ( [0] => 1 [1] => 3 [2] => 5 [3] => 7 [4] => 8 )
Array ( [0] => 1 [2] => 5 [3] => 7 [4] => 8 )
```

# Sortiranje niza

Funkcija `sort()` sortira niz po vrednostima članova.

```
<?php  
$x = array(4, 6, 2, 22, 11);  
sort($x);  
print_r($x);  
?>
```



```
Array ( [0] => 2 [1] => 4 [2] => 6 [3] => 11 [4] => 22 )
```

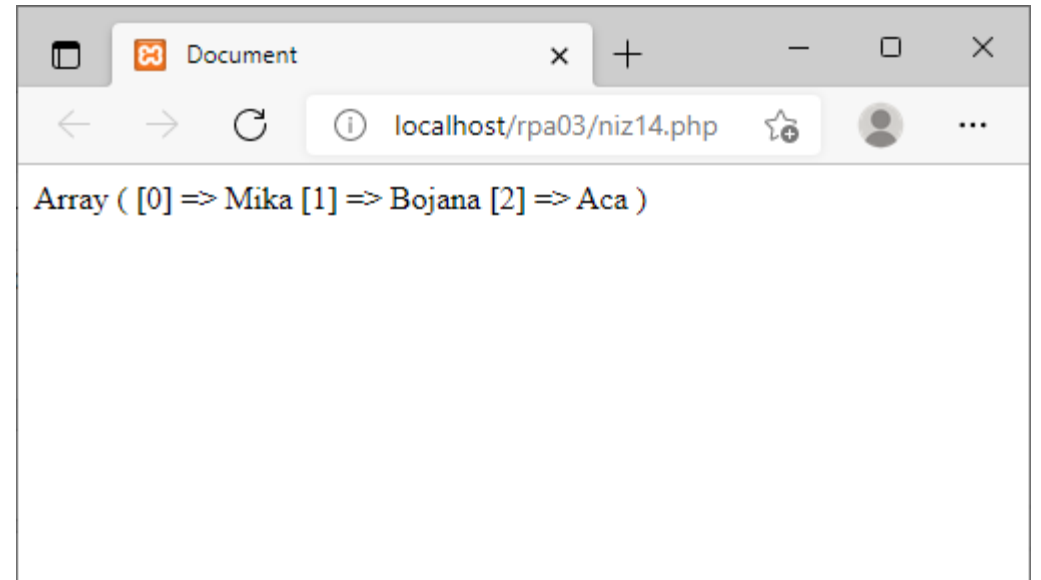


# Funkcija rsort()

Sortira niz po vrednostima članova u opadajućem poretku

```
<?php
$imena=array("Aca","Mika","Bojana");
rsort($imena);
print_r($imena);

?>
```



Document x + - □ ×

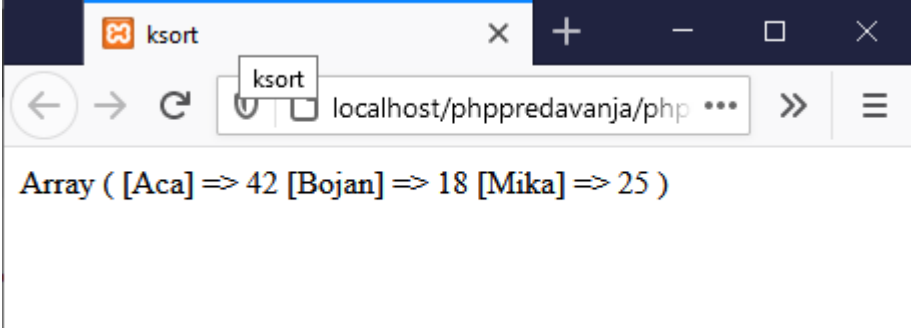
localhost/rpa03/niz14.php ☆ ⓘ

Array ( [0] => Mika [1] => Bojana [2] => Aca )

# Funkcija ksort()

Funkcija ksort() sortira niz po ključevima.

```
<?php  
$imena = array("Mika"=>25, "Bojan"=>18, "Aca"=>42);  
ksort($imena);  
print_r($imena);  
?>
```

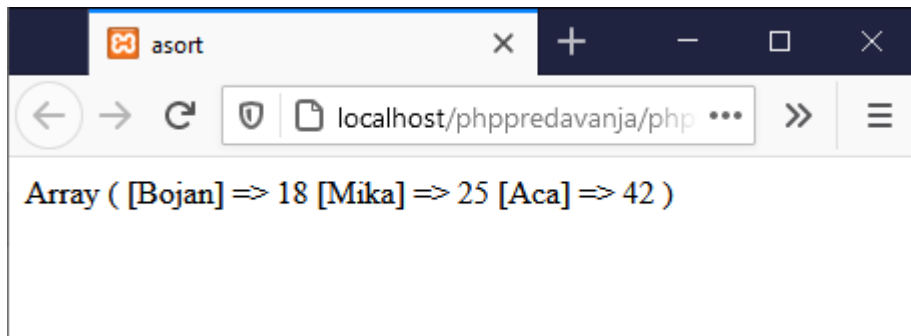


The screenshot shows a web browser window with the title 'ksort'. The address bar displays 'localhost/phppredavanja/php ...'. The main content area shows the output of the PHP code: 'Array ( [Aca] => 42 [Bojan] => 18 [Mika] => 25 )'. The browser window includes standard navigation buttons (back, forward, refresh) and window control buttons (close, maximize, minimize).

# Funkcija asort()

Sortira asocijativni niz po vrednostima

```
<?php
$imena = array("Mika"=>25, "Bojan"=>18, "Aca"=>42);
asort($imena);
print_r($imena);
?>
```

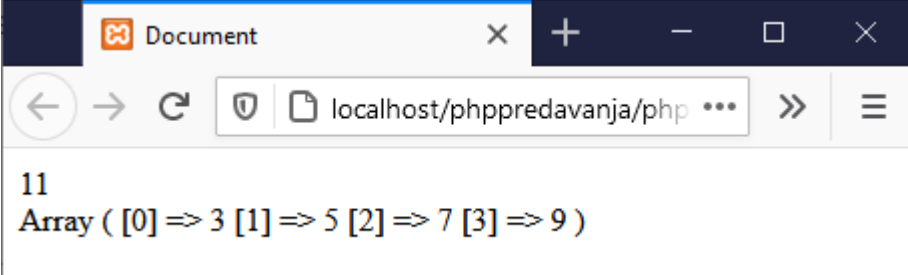


```
Array ( [Bojan] => 18 [Mika] => 25 [Aca] => 42 )
```

# Funkcija array\_pop()

Uklanja poslednji element niza. Funkcija vraća poslednji element niza.

```
<?php
$x = array(3,5,7,9,11);
$a = array_pop($x);
echo $a;
echo "<br>";
print_r($x);
?>
```



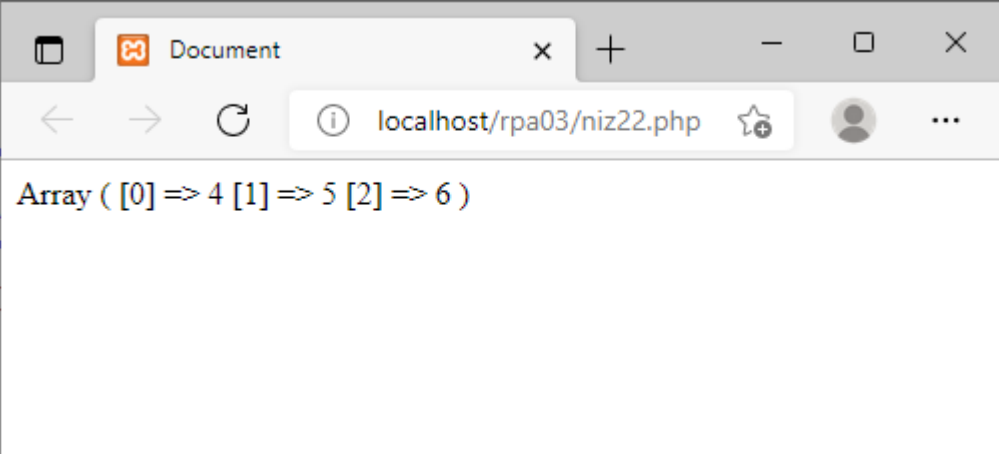
```
11
Array ( [0] => 3 [1] => 5 [2] => 7 [3] => 9 )
```

# Funkcija array\_shift

- Uklanja prvi element iz niza

```
<?php
    $arr = array(3,4,5,6);
    array_shift($arr);
    print_r($arr);

?>
```



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localhost/rpa03/niz22.php ☆+ 👤 ...

Array ( [0] => 4 [1] => 5 [2] => 6 )

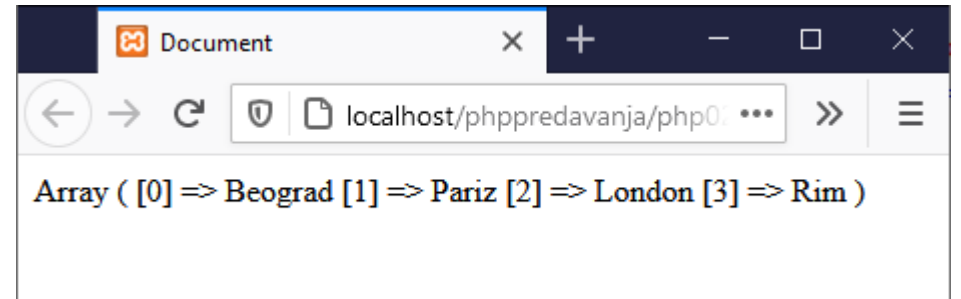
# Funkcija array\_push()

Dodaje jedan ili više elemenata na kraj niza

```
<?php
$niz = array("Beograd", "Pariz", "London");
array_push($niz, "Rim");
print_r($niz);

?>
```

```
$niz[] = "Rim";
```

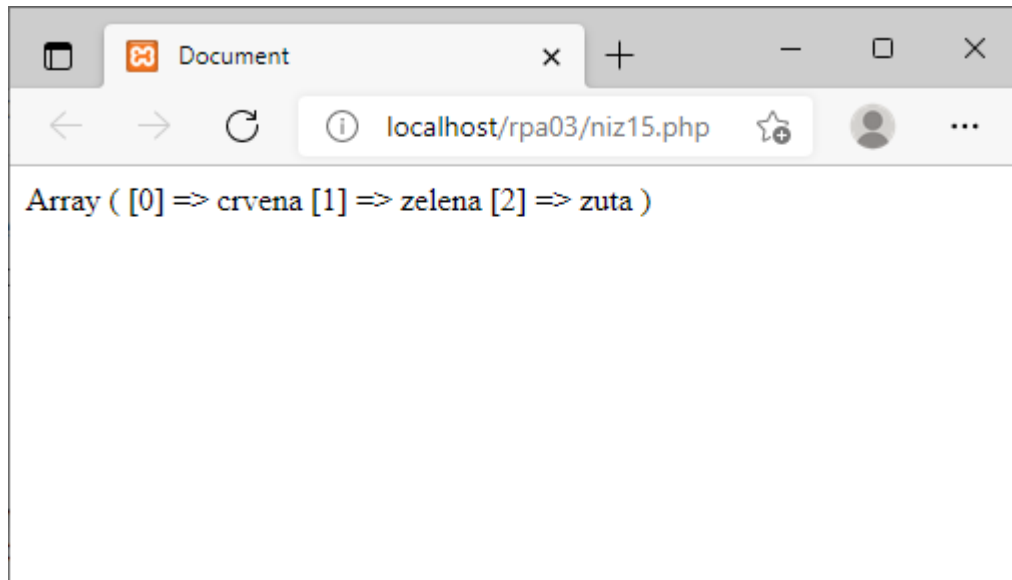


```
Document
localhost/phppredavanja/php0...
Array ( [0] => Beograd [1] => Pariz [2] => London [3] => Rim )
```

# Brisanje elementa sa pozicije u nizu

```
array_splice($niz, indeks, brojElementaZaBrisanje);
```

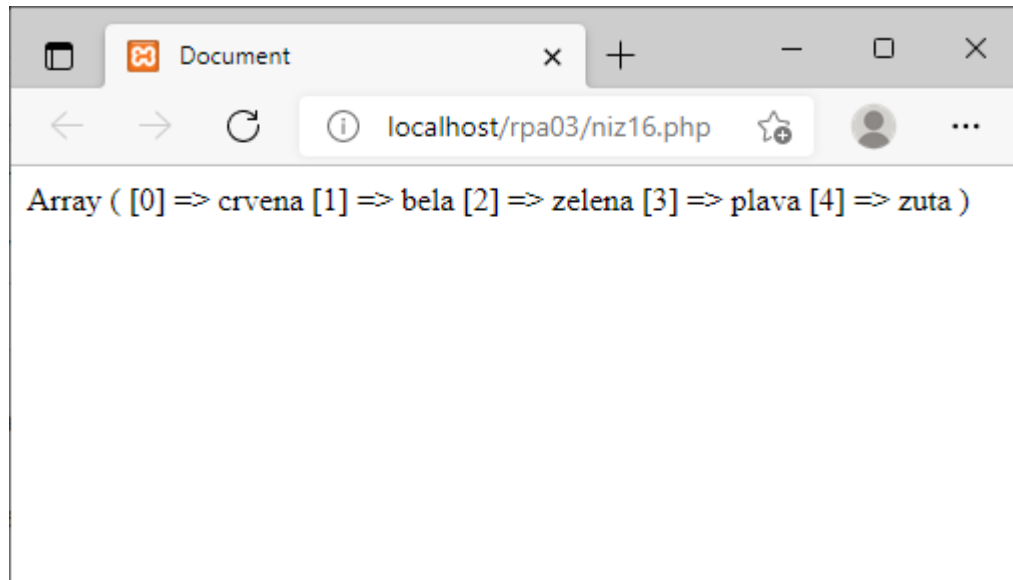
```
<?php  
$boje = array("crvena", "zelena", "plava", "zuta");  
array_splice($boje, 2, 1);  
print_r($boje);  
?>
```



The screenshot shows a web browser window with a single tab titled "Document". The address bar displays "localhost/rpa03/niz15.php". The main content area of the browser shows the output of the PHP script: "Array ( [0] => crvena [1] => zelena [2] => zuta )".

# Ubacivanje elemenata na poziciju

```
<?php
$boje = array("crvena", "zelena", "plava", "zuta");
array_splice($boje,1,0,"bela");
print_r($boje);
?>
```



```
Array ( [0] => crvena [1] => bela [2] => zelena [3] => plava [4] => zuta )
```

```
array_splice($niz,indeks,0,"elementKojiSeUbacije");
```

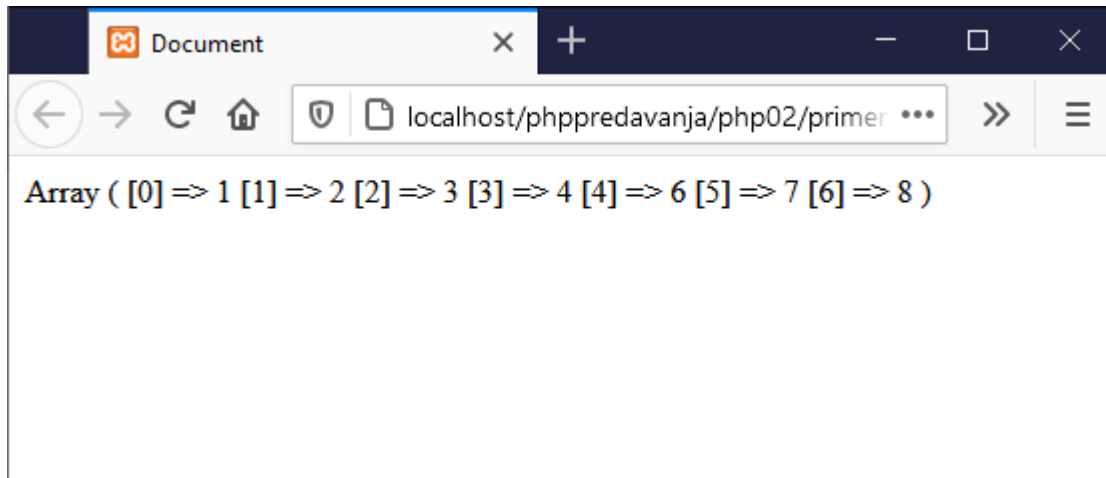


# Funkcija array\_merge()

```
<?php
$x1 = array(1,2,3,4);
$x2 = array(6,7,8);

$x3 = array_merge($x1,$x2);

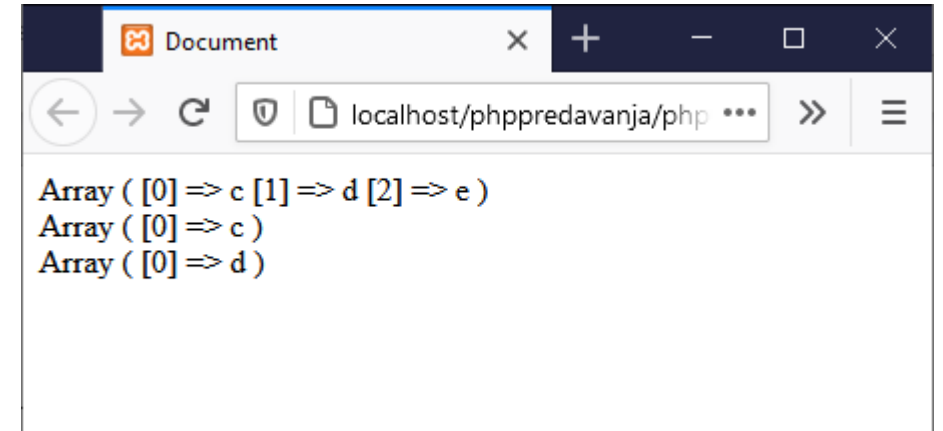
print_r($x3);
?>
```



```
Array ( [0] => 1 [1] => 2 [2] => 3 [3] => 4 [4] => 6 [5] => 7 [6] => 8 )
```

# Funkcija array\_slice()

```
<?php  
  
$x = array("a", "b", "c", "d", "e");  
  
$a1 = array_slice($x, 2);  
$a2 = array_slice($x, 2, 1);  
$a3 = array_slice($x, -2, 1);  
  
print_r( $a1);  
echo "<br>";  
print_r( $a2);  
echo "<br>";  
print_r( $a3);  
  
?>
```



```
Array ( [0] => c [1] => d [2] => e )  
Array ( [0] => c )  
Array ( [0] => d )
```

negativan offset odnosi se na kraj niza

# in\_array() funkcija

Pronalazi vrednost u nizu i vraća true ili false.

```
<?php
$arr=array("Belgrade","Paris","London","Mexico");
if(in_array("London",$arr)){
    echo "Pronadjjen London";
}
?>
```

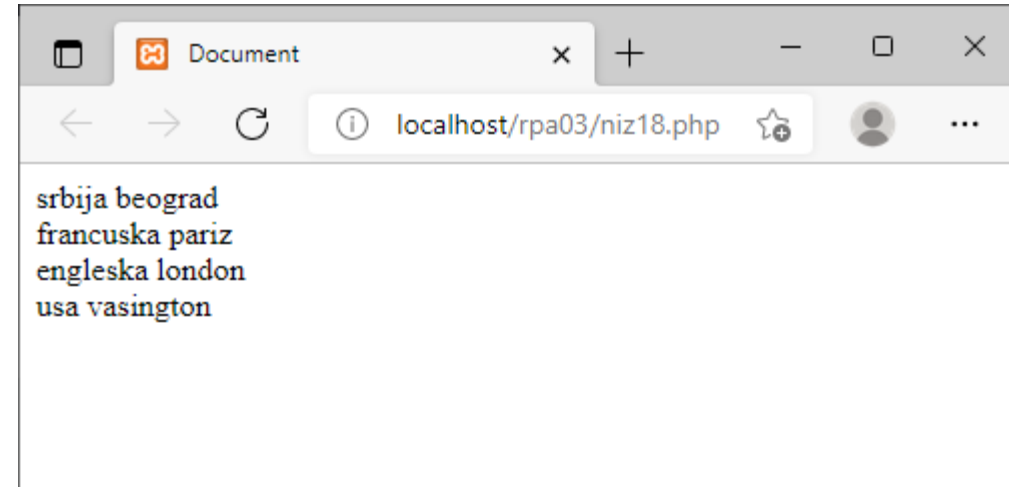
# Funkcija array\_walk()

Ova funkcija vrši kretanje kroz niz i izvršavanje određene funkcije na svakom članu tog niza.

```
<?php
function stampaj($value, $key)
{
    echo $key . " " . $value . "<br>";
}

$niz = array("srbija"=>"beograd", "francuska"=>"pariz",
"engleska"=>"london", "usa"=>"vasington");
array_walk($niz,"stampaj");

?>
```



# Funkcija array\_fill()

- Ukoliko želimo da formirano niz ispunjen nekom statičkom vrednošću, možemo upotrebiti ovu funkciju, pri čemu je prvi parametar – početni indeks niza, drugi parametar - broj ubačenih članova, a poslednji parametar - vrednost koja se ubacuje.

```
<?php  
$x=array_fill(0,100,"pozdrav");  
print_r($x);  
  
?>
```

# Funkcija array\_flip()

- Menja položaje ključeva i vrednosti.
- Ukoliko je niz sastavljen od ključeva i vrednosti, napraviće zamenu ključeva i vrednosti,
- Ukoliko niz nema ključeve, već samo indekse, zameniće indekse članova za vrednosti članova.

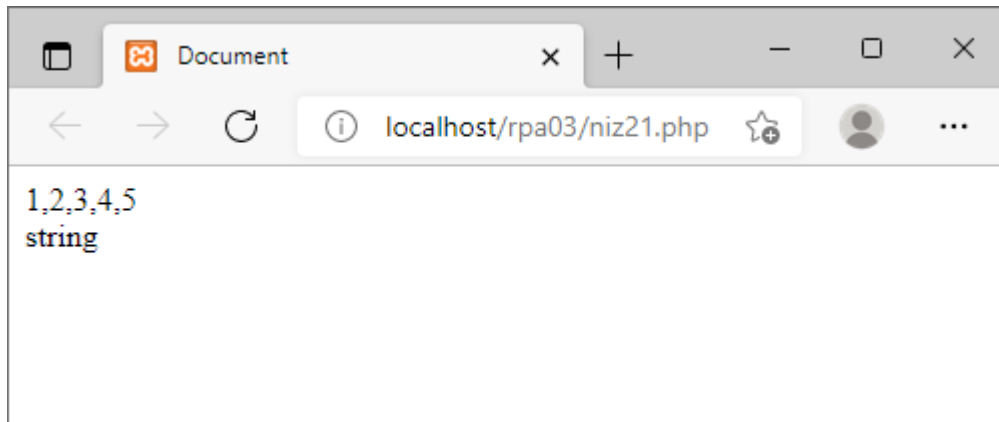
```
<?php
    $niz = array("srbija"=>"beograd", "francuska"=>"pariz",
"engleska"=>"london", "usa"=>"vasington");
    $x=array_flip($niz);
    print_r($x);

?>
```

# Pretvranje niza u string implode()

```
<?php
$a= array(1,2,3,4,5);
$b=implode(",",$a);
echo "$b<br>";
echo gettype($b);

?>
```



# Pretvaranje stringa u niz

```
<?php
$a= "1;2;3;4;5";
$b=explode(";", $a);
print_r($b);
echo "<br>";
echo gettype($b);
?>
```



# Interpolacija člana niza u string

```
//indeks je broj
$x1 = array("v01.php", "v02.php", "v03.php");
$s1 = "Drugi clan niza je: $x1[1]";
echo $s1;

echo "<br>";
$x2 = array("1"=>"v01.php", "2"=>"v02.php", "3"=>"v03.php");

//indeks je string
// ne radi
//$s2 = "Drugi clan niza je: $x2['2']";
$s2 = "Drugi clan niza je: {$x2["2"]}";
echo $s2;
```

Kada je ključ string pri interpolaciji se moraju koristiti vitičaste zagrade