

Access Modifiers in Perl

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objective

We will learn about



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We will learn about

- **Scope of variables**



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- **Private variables**



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- **Private variables**
- **Dynamically scoped variables**



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- **Private variables**
- **Dynamically scoped variables**
- **Global Variables**



System Requirements



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- **Ubuntu Linux 12.04 OS**



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- **Perl 5.14.2**



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- **Perl 5.14.2**
- **gedit Text Editor**



Pre-requisites

- **Basic knowledge of Perl Programming**



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- **Basic knowledge of Perl Programming**
- **For relevant Perl tutorials, visit <http://spoken-tutorial.org>**



Scope of variables



Scope of variables

The scope of a variable



Scope of variables

The scope of a variable

- Is the region of code within which a variable can be accessed



Scope of variables

The scope of a variable

- Is the region of code within which a variable can be accessed
- Refers to the visibility of variables



Access Modifiers in Perl



Access Modifiers in Perl

- **my** - Private variables



Access Modifiers in Perl

- **my** - Private variables
- **local** - Dynamically scoped variables



Access Modifiers in Perl

- **my** - Private variables
- **local** - Dynamically scoped variables
- **our** - Global variables



Private variable : `my`



Private variable : **my**

- **my** variable will lose scope outside the block in which they are declared



Declaration: `my`

- Declare a variable without giving a value

```
my $fvalue;
```



Declaration: **my**

- Declare a variable without giving a value

```
my $fvalue;
```

- Declare a variable by assigning a value

```
my $fvalue = 1;
```

```
my $fname = "Rahul";
```



Declaration: `my`

- Declare a variable without giving a value

```
my $fvalue;
```

- Declare a variable by assigning a value

```
my $fvalue = 1;
```

```
my $fname = "Rahul";
```

- Declare several variables

```
my ($fname, $lname, $age );
```



Dynamically scoped variable: **local**



Dynamically scoped variable: **local**

- **local** keyword gives a temporary scope to a global variable



Dynamically scoped variable: **local**

- **local** keyword gives a temporary scope to a global variable
- The variable is visible to any function called from the original block



Dynamic Scope: **local**

- Declaration:

```
local $fvalue = 100;
```

```
local $fname = "Rakesh";
```



Global variable: `our`

- **Global variables can be accessed anywhere in the program**



Global variable: **our**

- **Global variables can be accessed anywhere in the program**
- **Declaration:**

```
our $fvalue = 100;
```

```
our $fname = "Priya";
```



Summary

In this tutorial we learnt,

- **Scope of variables**
- **Declaration of private variables**
- **Dynamically scoped variables and**
- **Global variables**



Summary

In this tutorial we learnt,

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Note: It is preferred to use **my** than **local**



Assignment

Write the code for the following assignment and execute it

- 1 Declare a package as **FirstModule**
- 2 Declare a variable **\$age** as **our** and assign the value **42**
- 3 Declare another package as **SecondModule**



Assignment (cont.)

- 4 Declare a variable **\$ageword** as **our** and assign the value **"Forty-Two"**
- 5 Declare a subroutine **First()**
- 6 Inside the subroutine declare two variables with **local** and **my** keyword as below:

```
local $age=52;  
my $ageword="Fifty-Two";
```



Assignment (cont.)

- 7 Call another subroutine as **Result()**
- 8 Print the values of **\$age** and **\$ageword** inside this function.
- 9 End the subroutine
- 10 Declare the subroutine **Result()**
- 11 Again print the values of **\$age** and **\$ageword**
- 12 End the subroutine



Assignment (cont.)

- 13 Call the function **First()**
- 14 Print the Package First and package Second as below:

```
print "Package First :  
$FirstModule::age \n";  
print "Package Second :  
$SecondModule::ageword \n";
```



About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



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- **More information on this Mission is available at**

<http://spoken-tutorial.org/NMEICT-Intro>

