

# 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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- **Dynamically scoped variables**



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**We will learn about**

- **Scope of variables**
- **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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- **Ubuntu Linux 12.04 OS**
- **Perl 5.14.2**
- **gedit Text Editor**



# Pre-requisites

- **Basic knowledge of Perl Programming**



# Pre-requisites

- 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,

- Scope of variables
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- Global variables

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](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](mailto:contact@spoken-tutorial.org)



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- More information on this Mission is available at

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

