PHP Magic Constants

Topics : PHP
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Magic constants are the predefined constants in PHP which is changed depending on where they are used. They start with double underscore (__) and ends with double underscore.
These constants are created by various extensions. There are nine magic constant in the PHP and all of the constant resolved at the compile-time and the regular constant which is resolved at run time.

PHP's magic constants

All of the constants are resolved at compile-time instead of run time unlike the regular constant. Magic constants are case-insensitive.

List of PHP's magic constants

Name	Description
__LINE__	It returns the current line number of the file
__FILE__	It returns the full path and filename of the executed file. If it is used inside the include, the name of the included file is returned.
__DIR__	It returns the directory of the file. If it is used inside an include, the directory of the included file is returned. This is equivalent to dirname(__FILE__). This directory name does not have a trailing slash unless it is the root directory.
__FUNCTION__	It returns the function name where this constant is used. It will return blank if it is used outside of any function.
__CLASS__	It returns the class name. The class name includes the namespace if it was declared in (e.g. `Pack\Cla`). When used in a trait method, __CLASS__ is the name of the class the trait is used in.
__TRAIT__	It returns the trait name. The trait name includes the namespace if it was declared in (e.g. `Pack\Cla`).
__METHOD__	It returns the class method name.
__NAMESPACE__	It returns the name of the current namespace.
ClassName::class	It does not start and end with the double underscore (__). It returns the fully qualified name of the ClassName. It is useful with namespaced classes.

PHP Code Example for __LINE__:

```php
<?php
    echo "Printing at line number " . __LINE__ . "<br>";
?>
```

Output:

Printing at line number 2

PHP Code Example for __FILE__:

```php
<?php
    echo "Print full path of file : ".__FILE__ . "<br>";
?>
```

Output:

Print full path of file : E:\xampp\htdocs\phptraining\magic_constant.php

PHP Code Example for __DIR__:

```php
<?php
  echo "Print full path of directory : ".__DIR__ . "<br>";
?>
```

Output:

Print full path of directory : E:\xampp\htdocs\phptraining

PHP Code Example for __FUNCTION__:

```php
<?php
  //Using magic constant inside function.
  function get_func(){
     echo 'The function name is '. __FUNCTION__ . "<br>";
  }
  get_func();

?>
```

Output:

The function name is get_func

PHP Code Example for __CLASS__:

```php
<?php
  //Get Class name using magic constant __CLASS__
  class ARYATECHNO
  {
    public function __construct() { }
    function getClassName(){
       echo "Class name is ".__CLASS__ . "<br>";
      }
    }
  $obj = new ARYATECHNO;
  $obj->getClassName();
?>
```

Output:
Class name is ARYATECHNO

PHP Code Example for __TRAIT__:

```php
<?php
  //prints name of the trait
  trait get_Trait {
    function print_trait(){
       echo "Name of the trait :".__TRAIT__. "<br>";
    }
  }
  class ARYATECH {
    use get_Trait;
    }
  $obj = new ARYATECH;
  $obj->print_trait();
?>
```

Output:
Name of the trait :get_Trait

PHP Code Example for __METHOD__:

```php
<?php
  //Get method name using magic constants
  class MAGIC {
    public function __construct() {

        echo "Method name is ".__METHOD__ . "<br>";
      }
    public function get_method(){

        echo "Method name is ".__METHOD__."<br>";
    }
  }
  $obj = new MAGIC;
  $obj->get_method();
?>
```

Output:
Method name is MAGIC::__construct
Method name is MAGIC::get_method

PHP Code Example for __NAMESPACE__:
```php
<?php
  namespace PHPCODE;
  //Get namespace name using magic constants

  class package {
    public function __construct() {
      echo 'Namespace name is '.__NAMESPACE__."<br>";
    }
  }

  $obj = new package;
?>
```
Output:
Namespace name is PHPCODE

PHP Code Example for CLASSNAME::CLASS:
```php
<?php
  class CLASSA{
  }
  echo "Get class name : ".CLASSA::class."<br>";
?>
```
Output:
Get class name : PHPCODE\CLASSA

Output :