



Date & Time

1. Timezone Functions

`date_default_timezone_get()`

Get the current default timezone.

```
echo date_default_timezone_get() . "<br>";
```

`date_default_timezone_set(timezone)`

Set the default timezone.

```
date_default_timezone_set("Africa/Cairo");
```

`timezone_open(timezone)`

Open a timezone by its name.

```
$timezone = timezone_open("Indian/Antananarivo");
```

`date_create()`

Create a DateTime object. You can optionally specify a date and timezone.

```
$date = date_create("2022-10-01 15:5:3");  
echo date_format($date, "Y-m-d H:i:s");
```

`checkdate(M, D, Y)`

Validate a Gregorian date.

```
var_dump(checkdate(10, 25, 1982)); // true
var_dump(checkdate(31, 02, 1982)); // false
```

2. Date Formatting

`date_format()`

Format a DateTime object into a specific format.

```
$date = date_create();

echo date_format($date, "Y") . "<br>"; // Four-digit year
echo date_format($date, "y") . "<br>"; // Two-digit year
echo date_format($date, "F") . "<br>"; // Full month name
echo date_format($date, "l") . "<br>"; // Full day name
echo date_format($date, "Y-m-d") . "<br>"; // Date with dashes
```

3. Date Modifying Functions

`date_add()` and `date_sub()`

Add or subtract an interval from a date.

```
$date = date_create("2022-01-01");
date_add($date, date_interval_create_from_date_string("1 year
2 months 5 days"));
echo date_format($date, "Y-m-d"); // "2023-03-06"
```

```
$date = date_create("2022-01-01");
date_sub($date, date_interval_create_from_date_string("1 year
2 months 5 days"));
echo date_format($date, "Y-m-d"); // "2020-10-27"
```

`date_modify()`

Modify a date by adding or subtracting a time interval.

```
$date = date_create();  
date_modify($date, "+20 months");  
echo date_format($date, "Y-m-d"); // New date after 20 months
```

4. Timestamp and Parsing

`time()`

Get the current Unix timestamp.

```
echo time() . "<br>"; // Unix timestamp
```

`getdate()`

Get the current date and time in an associative array.

```
print_r(getdate());
```

`date_parse()`

Parse a date/time string into an array of components.

```
print_r(date_parse("1985-02-31 05:25:15 UTC"));
```

5. Date Difference

`date_diff()`

Get the difference between two dates.

```
$date1 = date_create("2022-01-09");  
$date2 = date_create("now");
```

```
$diff = date_diff($date1, $date2);  
  
echo "You are a member for " . $diff->days . " days.<br>;
```

strtotime()

Convert a date/time string into a Unix timestamp.

```
echo date("Y-m-d H:i:s", strtotime("next Friday")) . "<br>;  
// Date for next Friday  
echo date("Y-m-d H:i:s", strtotime("+1 year")) . "<br>; //  
Date after 1 year  
echo date("Y-m-d H:i:s", strtotime("tomorrow")) . "<br>; //  
Date for tomorrow
```

Example Usage

```
// Get current date and time  
echo date("Y-m-d H:i:s") . "<br>;  
  
// Set a specific timezone  
date_default_timezone_set("Asia/Kolkata");  
echo date("Y-m-d H:i:s") . "<br>;  
  
// Add 1 year and 5 months to the current date  
$date = date_create();  
date_modify($date, "+1 year 5 months");  
echo date_format($date, "Y-m-d") . "<br>;  
  
// Check if a date is valid  
var_dump(checkdate(02, 31, 2024)); // false
```

Summary:

- **Timezone Functions** help you manage and manipulate time zones.

- **Formatting Functions** allow you to display dates in various formats (year, month, day, etc.).
- **Date Modification** helps you add or subtract time from a date.
- **Time Functions** like `time()` and `getdate()` give you access to the current timestamp and components of the current date.
- **Date Differences** can be calculated using `date_diff()` and `strtotime()`.