

Basic constructs in PHP

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Months of the year

Our goal today is to generate this output

```
January - 31 days
February - 28 days
March - 31 days
April - 30 days
May - 31 days
June - 30 days
July - 31 days
August - 31 days
September - 30 days
October - 31 days
November - 30 days
December - 31 days
```

That is the number of days in a month for the current year.

Loop to generate generic date each month

```
<?php

$months= ["January","February","March","April","May","June",
"July","August","September","October","November","December"];

foreach ($months as $month) {
    $firstDateInMonth="1st " . "{$month} " . date("Y");
    echo $firstDateInMonth;
}
```

Generating days of the month

```
<?php

$months= ["January","February","March","April","May","June",
"July","August","September","October","November","December"];

foreach ($months as $month) {
    $firstDateInMonth="1st " . "{$month} " . date("Y");
    $dayAsTimeStamp=strtotime($firstDateInMonth);
    $dayInMonth=date("t",$dayAsTimeStamp);
    echo $dayInMonth;
}
```

Formatting the date

```
<?php
$months= ["January","February","March","April","May","June",
"July","August","September","October","November","December"];

foreach ($months as $month) {
    $firstDateInMonth="1st " . "{$month} " . date("Y");
    $dayAsTimeStamp=strtotime($firstDateInMonth);
    $dayInMonth=date("t",$dayAsTimeStamp);
    echo "{$month} - {$dayInMonth} </br>";
}
```

Reusing Code

Our code so far works and gives the desired output. However suppose we wanted to know the number of days in a month given the month?

Roping in functions

```
<?php

$months= ["January","February","March","April","May","June",
"July","August","September","October","November","December"];

foreach ($months as $month) {
    $dayInMonth=daysOfMonth($month);
    echo "{$month} - {$dayInMonth} </br>";
}

function daysOfMonth($month){
    $firstDateInMonth="1st " . "{$month} " . date("Y");
    $dayAsTimeStamp=strtotime($firstDateInMonth);
    $dayInMonth=date("t",$dayAsTimeStamp);
    return $dayInMonth;
}
```

Now we have neatly packed this bit of logic into a function that we can use another day.

As an exercise, try think of how you could make the exercise more robust.

Sample Usage

```
<?php
$month=$_REQUEST["month"];
$dayInMonth=daysOfMonth($month);
echo "This month has $dayInMonth";
function daysOfMonth($month){
    $firstDateInMonth="1st " . "{$month} " . date("Y");
    $dayAsTimeStamp=strtotime($firstDateInMonth);
    $dayInMonth=date("t",$dayAsTimeStamp);
    return $dayInMonth;
}
```


End of month pains

Now let us suppose that we get broke on 29th and salary checks in on 1st. Then for days with 31 days we would be in a sorry state. We would like to have a system that prints out status of our wallet.

Something like

January - Broke February - Good March - Broke April - Good May - Broke
June - Good July - Broke August - Broke September - Good October - Broke
November - Good December - Broke

How do you suppose we would impliment something of this sort?

Teaching your computer to decide

```
<?php
$months= ["January","February","March","April","May","June",
"July","August","September","October","November","December"];
foreach ($months as $month) {
    $dayInMonth=daysOfMonth($month);
    if($dayInMonth > 30){

        echo "{$month} - Broke </br>";
    }
    else {

        echo "{$month} - Good </br>";
    }
}

function daysOfMonth($month){
    $firstDateInMonth="1st " . "{$month} " . date("Y");
    $dayAsTimeStamp=strtotime($firstDateInMonth);
    $dayInMonth=date("t",$dayAsTimeStamp);
    return $dayInMonth;
}
```

Assignment

Write a PHP script that shows the day of the week for the last day of the month.

Eg

January first day was Thursday February first day was Sunday

etc