Write a program in PHP to demonstrate variable functions: gettype(), settype(), isset(), unset()

```
<?php
num = 10;
$type = gettype($num);
echo "Type of \$num: $type<br>";
settype($num, 'string');
$type = gettype($num);
echo "Type of \$num after settype(): $type<br>";
if (isset($num)) {
    echo "\$num is set and not null<br>";
} else {
    echo "\$num is not set or null<br>";
unset($num);
if (isset($num)) {
    echo "\$num is set and not null<br>";
} else {
    echo "\$num is not set or null<br>";
}
?>
```

Type of \$num: integer

Type of \$num after settype(): string

\$num is set and not null

\$num is not set or null

Write a program in PHP to check student grades based on the marks using if-else statement

```
<?php
marks = 57;
if (\text{$marks} >= 90) {
    $grade = 'A+';
} elseif ($marks >= 80) {
    $grade = 'A';
} elseif ($marks >= 70) {
    $grade = 'B';
} elseif ($marks >= 60) {
    $grade = 'C';
} elseif ($marks >= 50) {
    $grade = 'D';
} else {
    $grade = 'F';
echo "Student's marks: $marks<br>";
echo "Student's grade: $grade";
?>
```

Student's marks: 57 Student's grade: D

Write a program in PHP to show day of the week based on numbers using switch case statement

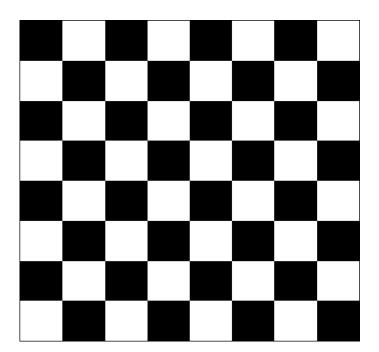
```
<?php
$dayNumber = 3;
switch ($dayNumber) {
    case 0:
        $dayName = 'Sunday';
        break;
    case 1:
        $dayName = 'Monday';
        break;
    case 2:
        $dayName = 'Tuesday';
        break;
    case 3:
        $dayName = 'Wednesday';
        break;
    case 4:
        $dayName = 'Thursday';
        break;
    case 5:
        $dayName = 'Friday';
        break;
    case 6:
        $dayName = 'Saturday';
        break;
    default:
        $dayName = 'Invalid day number';
        break;
echo "Day Number: $dayNumber<br>";
echo "Day Name: $dayName";
?>
```

Day Number: 3 Day Name: Wednesday

Write a program in PHP using nested for loop that creates a chess board.

Condition: You can use html table having width=400px and take 30px as cell height and width

```
<!DOCTYPE html>
<html>
<head>
   <title>Chess Board</title>
   <style>
      table {
          width: 400px;
          border-collapse: collapse;
          border: 1px black solid;
       }
       td {
          width: 30px;
          height: 30px;
       }
       .white {
          background-color: #ffffff;
       }
       .black {
          background-color: #000000;
       }
   </style>
</head>
<body>
   <?php
       for ($row = 1; $row <= 8; $row++) {
          echo "";
          for ($col = 1; $col <= 8; $col++) {
              $total = $row + $col;
              if ($total % 2 == 0) {
                  echo "";
              } else {
                  echo "";
          }
          echo "";
       }
       ?>
   </body>
</html>
```



Create a PHP script which displays the capital and country name from the array .Sort the list by the capital of the countries.

Example- Capital of Germany is Berlin

```
<?php
// Array of country-capital pairs
$countries = array(
    array("country" => "Germany", "capital" => "Berlin"),
array("country" => "France", "capital" => "Paris"),
    array("country" => "United States", "capital" => "Washington,
D.C."),
    array("country" => "Japan", "capital" => "Tokyo"),
    array("country" => "India", "capital" => "New Delhi")
);
// Function to sort the countries based on capital
function sortByCapital($a, $b) {
    return strcmp($a['capital'], $b['capital']);
}
// Sort the countries by capital
usort($countries, 'sortByCapital');
// Display the capital and country name
foreach ($countries as $country) {
    echo "Capital of " . $country['country'] . " is " .
$country['capital'] . "<br>";
}
?>
</body>
</html>
```

Capital of Germany is Berlin Capital of India is New Delhi Capital of France is Paris Capital of Japan is Tokyo Capital of United States is Washington, D.C.

Write a PHP function to change the following array's values to occur in upper or lower case. \$color = array("a"=>"blue","b"=>"green","c"=>"red")

1)values are in lower case : array("a"=>"blue","b"=>"green","c"=>"red")

```
<?php
function changeCase(array $array, string $case): array {
    $result = array();
    foreach ($array as $key => $value) {
        if ($case === 'lower') {
            $result[$key] = strtolower($value);
        } elseif ($case === 'upper') {
            $result[$key] = strtoupper($value);
        } else {
            $result[$key] = $value; // Keep the original value if
case is not 'lower' or 'upper'
    return $result;
}
// Example usage:
$color = array("a" => "blue", "b" => "green", "c" => "red");
$lowerCaseColor = changeCase($color, 'lower');
$upperCaseColor = changeCase($color, 'upper');
// Output
print_r($lowerCaseColor);
echo"<br>";
print_r($upperCaseColor);
>>
```

```
Array ( [a] => blue [b] => green [c] => red )
Array ( [a] => BLUE [b] => GREEN [c] => RED )
```