

LAMP Practical 2

Date: **07-02-2023**

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Course Code and Name: 2CSDE69 **LAMP Technologies**

Task

- Check if the given number is Harshad number or not.
- Check if the given number is Special number or not.
- Check if the given number is Kaprekar number or not.
- Check if the given number is Automorphic number or not.

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Prac 2</title>
</head>

<body>
  <?php
    // Harshad Number
    echo "<h1>Practical 2A: Harshad Number</h1>";
    $num = 156;
    $rem = $sum = 0;
    $n = $num;

    while ($num > 0) {
      $rem = $num % 10;
      $sum = $sum + $rem;
      $num = intval($num / 10);
    }

    if ($n % $sum == 0)
      echo "$n is a Harshad number as it is divisible by $sum.";
    else
      echo "$n is not a Harshad number as it is not divisible by $sum.";

    // -----

    // Special Number
    echo "<h1>Practical 2B: Special Number</h1>";
```

```

$num = 59;
$rem = $sum = 0;
$mul = 1;
$n = $num;

while ($num > 0) {
    $rem = $num % 10;
    $sum += $rem;
    $mul *= $rem;
    $num = intval($num / 10);
}

if ($mul + $sum === $n)
    echo "$n is a special number because $mul+$sum=$n.";
else
    echo "$n is not a special number because $mul+$sum!=$n.";

// -----

// Kaprekar Number
echo "<h1>Practical 2C: Kaprekar Number</h1>";
$num = 297;
$square = (string)($num ** 2);

for ($index = 0; $index < strlen($square); $index++) {
    $left_number = (substr($square, 0, $index + 1));
    $right_number = (substr($square, $index + 1, strlen($square)));

    if (intval($left_number) + intval($right_number) === $num) {
        echo "$n is Kaprekar number because $left_number+$right_number=$num.";
        break;
    } else {
        continue;
    }
}

// -----

// Automorphic Number
echo "<h1>Practical 2D: Automorphic Number</h1>";
$num = (string)25;
$square = (string)($num ** 2);

if (substr($square, strlen($square) - strlen($num), strlen($square)) === $num) {
    echo "$num is Automorphic number as last " . strlen($num) . " character[s] of $square is/are $num.";
} else {
    echo "$num is not Automorphic number as last " . strlen($num) . " character[s] of $square is/are not $num."
}
echo "<br><br>";

// -----

```

```

// GLOBALS Array
echo "<h1>GLOBALS Arrays</h1>";

function globals_test()
{
    $test_var = "This is local variable";
    echo '$test_var in global scope: ' . $GLOBALS["test_var"] . "<br>";
    echo '$test_var in current scope: ' . $test_var . "<br>";
}

$test_var = "This is global variable";
globals_test();
echo "<br><br>";

// -----

// _SERVER Array
echo "<h1>_SERVER Arrays</h1>";

echo "php_self: " . $_SERVER['PHP_SELF'] . "<br>";
echo "server_name: " . $_SERVER['SERVER_NAME'] . "<br>";
echo "http_host: " . $_SERVER['HTTP_HOST'] . "<br>";
echo "http_referer: " . $_SERVER['HTTP_REFERER'] . "<br>";
echo "http_user_agent: " . $_SERVER['HTTP_USER_AGENT'] . "<br>";
echo "script_name: " . $_SERVER['SCRIPT_NAME'] . "<br>";
echo "SERVER_SOFTWARE: " . $_SERVER['SERVER_SOFTWARE'] . "<br>";

?>

</body>

</html>

```

Output

Practical 2A: Harshad Number

156 is a Harshad number as it is divisible by 12.

Practical 2B: Special Number

59 is a special number because $45+14=59$.

Practical 2C: Kaprekar Number

59 is Kaprekar number because $88+209=297$.

Practical 2D: Automorphic Number

25 is Automorphic number as last 2 character[s] of 625 is/are 25.