

# 1

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<?php
//Write a PHP program for print Previous semester Result using variables & //constants in PHP.

// Define constants for the previous semester's result
//syntax: define(name,value)
define("SUBJECT_1", "Mathematics");
define("SUBJECT_2", "Physics");
define("SUBJECT_3", "Chemistry");

// Define variables for marks obtained - variable comes with $ sign
$marks_subject_1 = 85;
$marks_subject_2 = 75;
$marks_subject_3 = 80;

// Calculate total marks
$total_marks = $marks_subject_1 + $marks_subject_2 + $marks_subject_3;

// Calculate percentage
$percentage = ($total_marks / 300) * 100;

// Print the result, echo is use to print anything in php
echo "Previous Semester Result."<br>;
echo "-----<br>";
echo "Subject\t\tMarks Obtained<br>";
echo "-----<br>";
echo SUBJECT_1 . "\t\t" . $marks_subject_1 . "<br>";
echo SUBJECT_2 . "\t\t" . $marks_subject_2 . "<br>";
echo SUBJECT_3 . "\t\t" . $marks_subject_3 . "<br>";
echo "-----<br>";
echo "Total Marks:\t" . $total_marks . "/300<br>";
echo "Percentage:\t" . number_format($percentage, 2) . "%<br>";
-?>
```

## 2

```
<?php
// Define an array of numbers
//array: collection of elements

$numbers = array(10, 55, 20, 15, 30);

#print($numbers)

// Find the maximum number
$max_number = max($numbers);

// Find the minimum number
$min_number = min($numbers);

// Print the maximum and minimum numbers
echo "Maximum Number: " . $max_number . "<br>";
echo "Minimum Number: " . $min_number . "<br>";
?>
```

### 3

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<?php
//Write a PHP program for operators in PHP

// Arithmetic operators
$a = 10;
$b = 5;
$addition = $a + $b;
$subtraction = $a - $b;
$multiplication = $a * $b;
$division = $a / $b;
$modulo = $a % $b;

echo "Arithmetic Operators:<br>";
echo "Addition: $addition<br>";
echo "Subtraction: $subtraction<br>";
echo "Multiplication: $multiplication<br>";
echo "Division: $division<br>";
echo "Modulo: $modulo<br><br>";

// Assignment operators
$x = 20;
$y = 10;
//$x += $y; // Equivalent to $x = $x + $y;20+10
$x-=$y;
echo "Assignment Operators:<br>";
echo "x -= y: $x<br><br>";
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echo "x == y: $x<br><br>";

// Comparison operators
$p = 10;
$q = 20;
echo "Comparison Operators:<br>";
echo "Equal to (p == q): " . ($p == $q) . "<br>"; //false
echo "Not equal to (p != q): " . ($p != $q) . "<br>"; //true
echo "Greater than (p > q): " . ($p > $q) . "<br>"; //false
echo "Less than (p < q): " . ($p < $q) . "<br>"; //true
echo "Greater than or equal to (p >= q): " . ($p >= $q) . "<br>"; //false
echo "Less than or equal to (p <= q): " . ($p <= $q) . "<br><br>"; //true

// Logical operators
$bool1 = true;
$bool2 = false;
echo "Logical Operators:<br>";
echo "AND (bool1 && bool2): " . ($bool1 && $bool2) . "<br>"; //false
echo "OR (bool1 || bool2): " . ($bool1 || $bool2) . "<br>"; //true
echo "NOT (!bool1): " . (!$bool1) . "<br><br>"; //false

// Increment and decrement operators
$num = 5;
echo "Increment and Decrement Operators:<br>";
echo "Initial value of num: $num<br>";
$num++;
echo "After incrementing num: $num<br>";
$num--;
echo "After decrementing num: $num<br>";

?>
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```

<?php
//Write a PHP program to print current month using if..else& switch case

// Using if...else
//date() : take system date and m will be number of month i.e. 05(may)
$month_number = date('m'); //05

echo "Using if...else:<br>";
if ($month_number == 1)
{
    echo "January<br>";
} elseif ($month_number == 2)
{
    echo "February<br>";
} elseif ($month_number == 3)
{
    echo "March<br>";
} elseif ($month_number == 4)
{
    echo "April<br>";
} elseif ($month_number == 5)
{
    echo "May<br>";
} elseif ($month_number == 6)
{
    echo "June<br>";
} elseif ($month_number == 7)
{
    echo "July<br>";
} elseif ($month_number == 8)
{
    echo "August<br>";
} elseif ($month_number == 9)
{
    echo "September<br>";
} elseif ($month_number == 10)
{
    echo "October<br>";
} elseif ($month_number == 11)
{
    echo "November<br>";
} elseif ($month_number == 12)
{
    echo "December<br>";
}

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    echo "November<br>";
} elseif ($month_number == 12)
{
    echo "December<br>";
}

// Using switch case
echo "<br>Using switch case:<br>";
switch (4) {
    case 1:
        echo "January<br>";
        break;
    case 2:
        echo "February<br>";
        break;
    case 3:
        echo "March<br>";
        break;
    case 4:
        echo "April<br>";
        break;
    case 5:
        echo "May<br>";
        break;
    case 6:
        echo "June<br>";
        break;
    case 7:
        echo "July<br>";
        break;
    case 8:
        echo "August<br>";
        break;
    case 9:
        echo "September<br>";
        break;
    case 10:
        echo "October<br>";
        break;
    case 11:
        echo "November<br>";
        break;
    case 12:
        echo "December<br>";
        break;
    default:
        echo "Invalid month<br>";
        break;
}
?>
```

```

<?php
//Write a PHP program to print 5 to 10 using For and ForEach.

echo "Using for loop:<br>";
//for(int i; condition; increment/decrement)

//increment
echo "Increment<br>";
for ($i = 5; $i <= 10; $i++)
{
    echo $i . " ";
}

//decrement
echo "<br>Decrement<br>";
for ($i = 15; $i >= 10; $i--)
{
    echo $i . " ";
}

echo "<br>Using foreach loop:<br>";

//range(start,end,step=optional)
$numbers = range(11,15); //11 12 13 14 15

foreach($numbers as $x) {
    echo $x . "<br>";
}

//example of alphabets
echo "<br>This is using Alphabets in foreach : <br> ";
$alpha=range('a','e');

foreach($alpha as $a)
{
    echo $a."<br>";
}

echo "Reverse alphabets : <br>";
$alpha2=range('i','a',3);

foreach($alpha2 as $a)
{
    echo $a."<br>";
}

?>

```

