*Assignment 3*

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

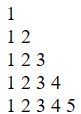
<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Assignment 3</title>

</head>

<body>

<?php

 //Question 1 – Pattern 1

for ($i = 1; $i < 6; $i++) {

for ($j = 1; $j <= $i; $j++)

echo "$j\n";

echo "<br>";

}

 //Question 2 - Pattern 2

$c = 1;

for ($i = 1; $i < 5; $i++) {

for ($j = 1; $j <= $i; $j++)

echo $c++.”\n";

echo "<br>";

}

//Question 3 - Factorial of a number

$n1 = 5; $f = 1;

for (; $n1 > 0; $n1--)

$f \*= $n1;

echo $f //120

//Question 4 - Reverse a string

$s1 = "Hello"; $s2 = "";

for ($i = strlen($s1) - 1; $i >= 0; $i--)

$s2 .= $s1[$i];

echo $s2; //olleH

//Question 5 - Area of rectangle, square & circle

$l = 6.6; $b = 5.4; $s = 4.9; $r = 8; define("PI", 3.14);

function rec($l, $b) {

echo "Area of rectangle: ".$l \* $b;

}

function sq($s) {

echo "Area of square: ".$s \*\* 2;

}

function cir($r) {

echo "Area of circle: ".PI \* $r \*\* 2;

}

rec($l, $b); //Area of rectangle: 35.64

sq($s); //Area of square: 24.01

cir($r); //Area of circle: 200.96

//Question 6 - Count the number of 1's in binary representation of a number using bitwise '&'

$n = 7; $c = 0;

for (; $n != 0 ; $n /= 2)

if ($n & 1)

$c++;

echo $c; //3

//Question 7 - Print odd number within range

$d = 10; $e = 21;

for (; $d <= $e; $d++)

if ($d & 1)

echo $d."\n"; //11 13 15 17 19 21

//Question 8 - Count the number of uppercase letters in a string

$s = "hAlLoWeEn"; $c = 0;

for ($i = 0; $i < strlen($s); $i++)

if (ord($s[$i]) >= 65 AND ord($s[$i]) <= 90)

$c++;

echo $c; //4

 //Question 9 - Pattern 3

for ($i = 1; $i < 4; $i++) {

for ($j = 2; $j >= $i; $j--)

echo "&nbsp;&nbsp;&nbsp;";

for ($j = 1; $j <= $i; $j++)

echo "\*\n";

echo "<br>";

}

//Question 10 - Implicit & Explicit conversion

$a = 56; $b = 12;

$c = $a / $b;

echo $c; //4.6666667(Implicit)

echo (int)$c; //4(Explicit)

// Question 11 - Simple Interest

$p = 10000; $r = 3; $t = 4;

$si = ($p \* $r \* $t)/ 100;

echo $si; //1200

// Question 12 - Day of the week using switch case

$day = 5;

switch ($day) {

case 1:

echo "Its Sunday";

break;

case 2:

echo "Its Monday";

break;

case 3:

echo "Its Tuesday";

break;

case 4:

echo "Its Wednesday";

break;

case 5: //Its Thursday

echo "Its Thursday";

break;

case 6:

echo "Its Friday";

break;

case 7:

echo "Its Saturday";

break;

default:

echo "Invalid number";

}

// Question 13 - Swap two numbers

$a = 5; $b = 7;

echo "Before swap, A: $a B: $b"; //Before swap, A: 5 B: 7

$a = $a + $b;

$b = $a - $b;

$a = $a - $b;

echo "<br>After swap, A: $a B: $b"; //After swap, A: 7 B: 5

// Question 14 - Sum of digits of a given numbers

$n = 251; $s = 0;

for (; $n > 0; $n /= 10)

$s += $n % 10;

echo $s; //8

// Question 15 - Prime number between 1 & 50

$a = 2; $b = 50;

for (; $a < $b; $a++) {

$isPrime = true;

for ($i = 2; $i <= $a/2; $i++)

if (!($a % $i)) {

$isPrime = false;

break;

}

if ($isPrime)

echo $a."\n"; //2 3 5 7 11 13 17 19 23 29 31 37 41 43 47

}

?>

</body>

</html>