

PHP ASSIGNMENT

1. Write a PHP program to enter marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer, calculate percentage and grade by if else.

```
<?php
// PHP Script to Calculate Total Marks of Student and Display Grade
// These are the marks of five subjects
$Science = 95;
$English = 85;
$Math = 74;
$Hindi = 64;
$Gujrati = 53;

$total = NULL;
$average = NULL;
$percentage = NULL;
$grade = NULL;

// It will calculate total, average, percentage, and grade
$total = $Science + $English + $Math + $Hindi + $Gujrati;
$average = $total / 5.0;
$percentage = ($total / 500.0) * 100;

if ($average >= 90)
    $grade = "A";
else if ($average >= 80 && $average < 90)
    $grade = "B";
else if ($average >= 70 && $average < 80)
    $grade = "C";
else if ($average >= 60 && $average < 70)
    $grade = "D";
else
    $grade = "E";

echo "Science=95"."<br>";
echo "English = 85"."<br>";
echo "Math = 74"."<br>";
echo "Hindi = 64"."<br>";
echo "Gujrati = 53"."<br>".<br>;
// It will print the final output
echo "The Total marks = " . $total . "/500\n"."<br>";
echo "The Average marks = " . $average . "\n"."<br>";
echo "The Percentage = " . $percentage . "%\n"."<br>";
echo "The Grade = " . $grade . "\n"."<br>";

?>
```

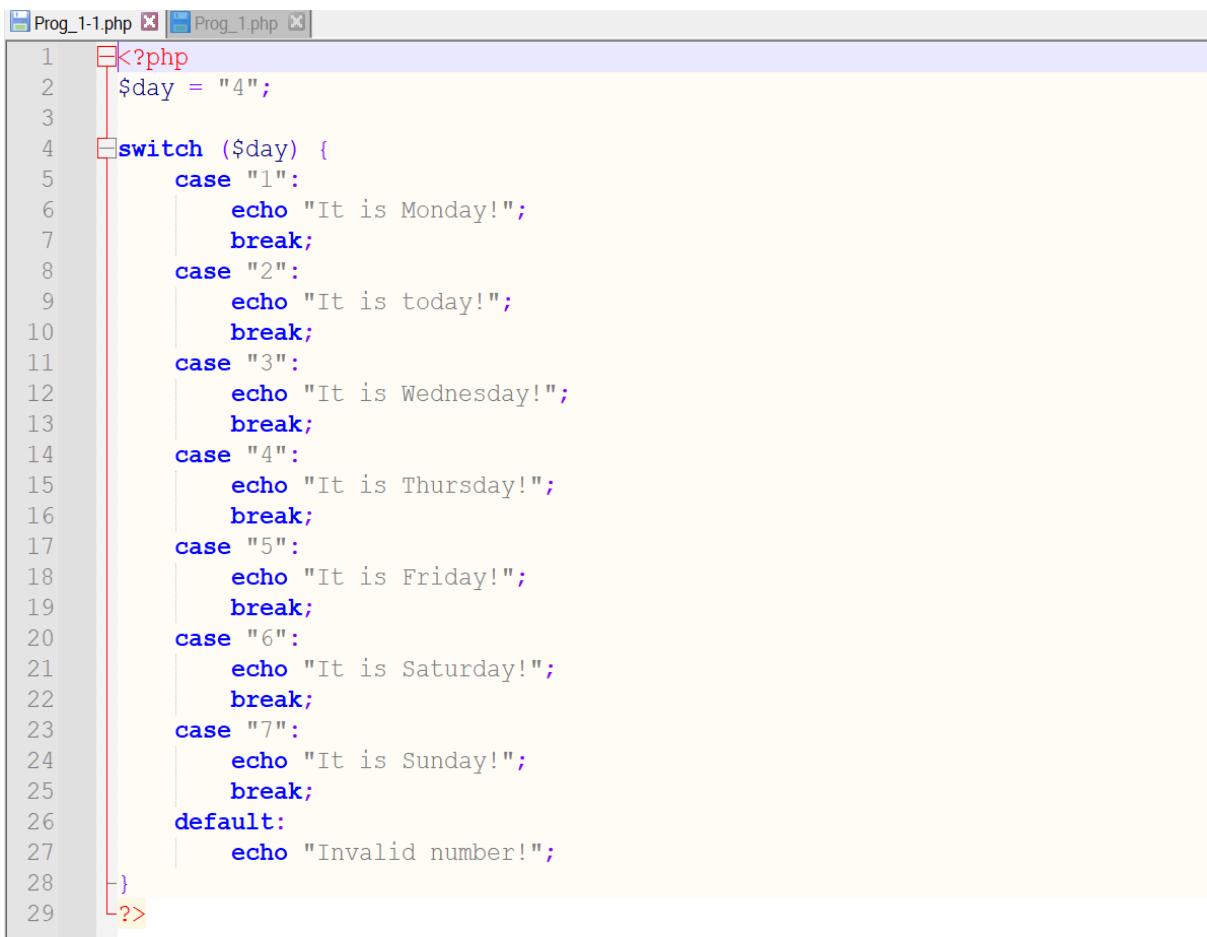
Output:-

localhost/Core_php_assignment/Prog_1.php

Science=95
English = 85
Math = 74
Hindi = 64
Gujrati = 53

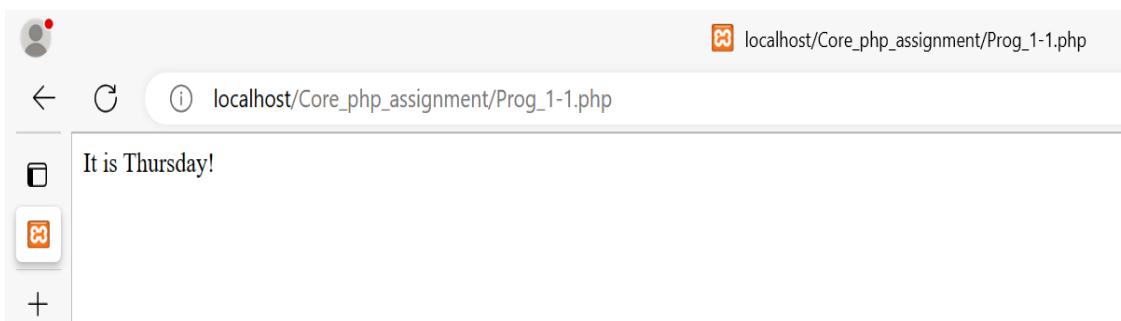
The Total marks = 371/500
The Average marks = 74.2
The Percentage = 74.2%
The Grade = 'C'

2. write a PHP program for find „Thursday“ in week using switch Function.



```
1 <?php
2 $day = "4";
3
4 switch ($day) {
5     case "1":
6         echo "It is Monday!";
7         break;
8     case "2":
9         echo "It is today!";
10        break;
11    case "3":
12        echo "It is Wednesday!";
13        break;
14    case "4":
15        echo "It is Thursday!";
16        break;
17    case "5":
18        echo "It is Friday!";
19        break;
20    case "6":
21        echo "It is Saturday!";
22        break;
23    case "7":
24        echo "It is Sunday!";
25        break;
26    default:
27        echo "Invalid number!";
28
29 ?>
```

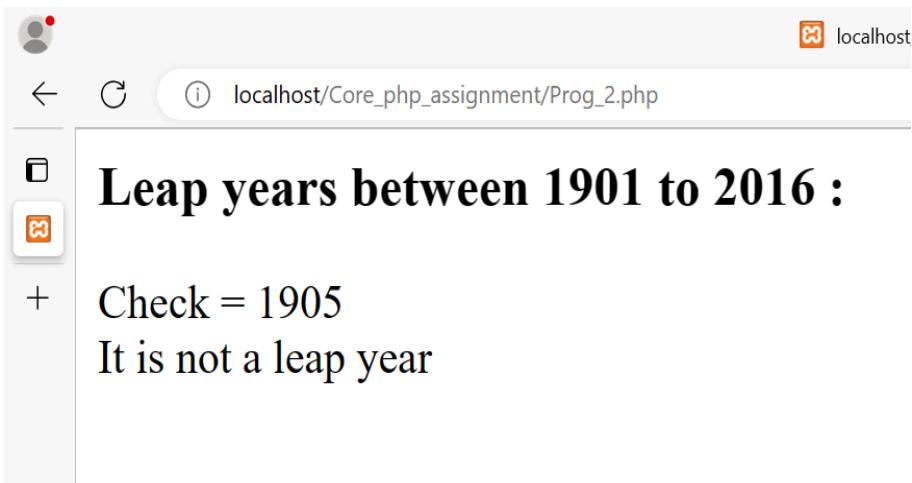
Output:-



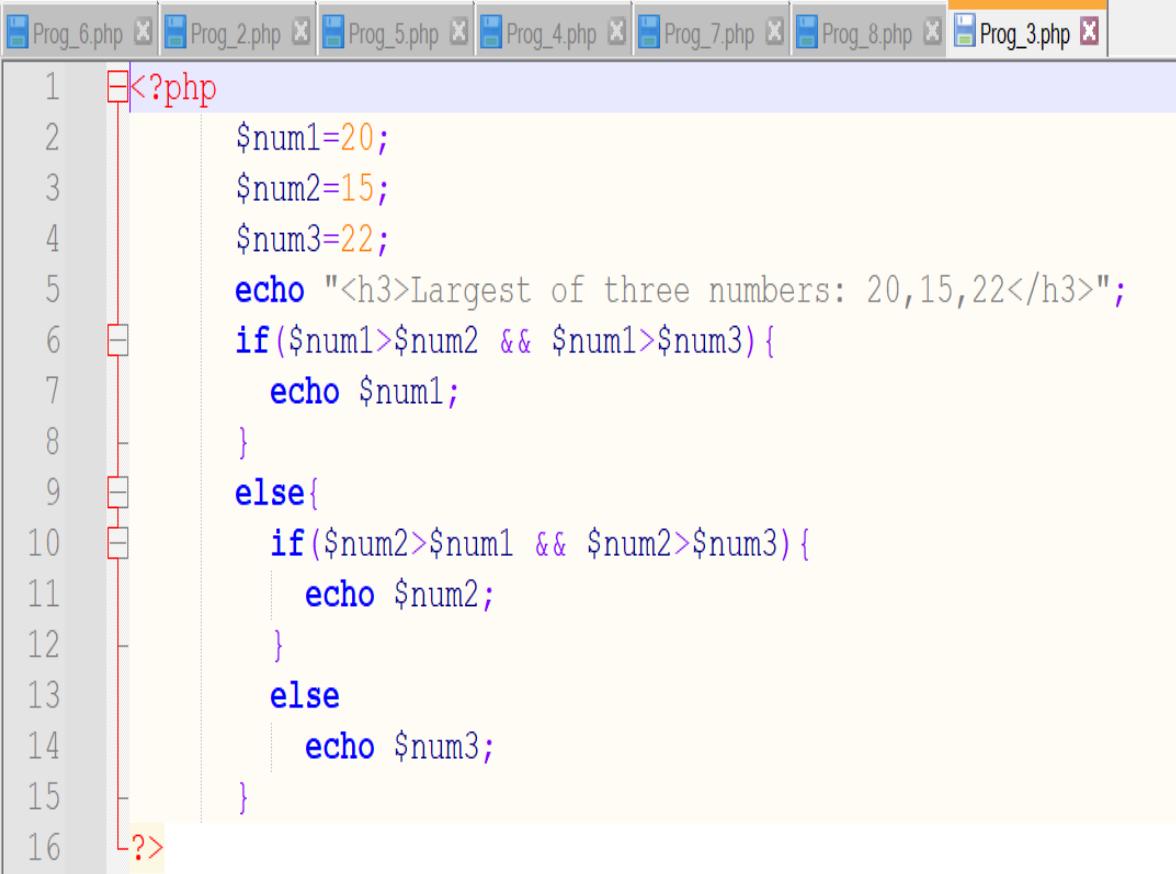
3. Write a PHP program to check Leap years between 1901 to 2016 Using nested if.

```
1 <?php
2     function year_check($my_year)
3     {
4         if ($my_year % 400 == 0)
5             print("It is a leap year");
6         else if ($my_year % 100 == 0)
7             print("It is not a leap year");
8         else if ($my_year % 4 == 0)
9             print("It is a leap year");
10        else
11            print("It is not a leap year");
12    }
13    echo "<h3>Leap years between 1901 to 2016 :</h3>";
14    echo "Check = 1905."<br>;
15    $my_year = 1905;
16    year_check($my_year);
17 ?>
```

Output:-

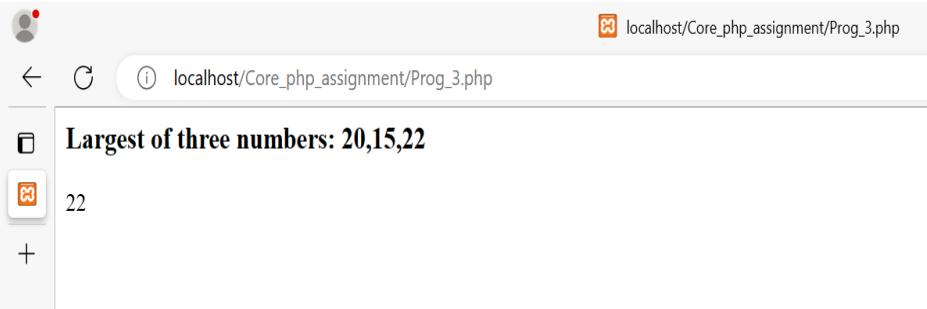


4. Write a PHP program to find the largest of three numbers using ternary Operator.



```
1 <?php
2     $num1=20;
3     $num2=15;
4     $num3=22;
5     echo "<h3>Largest of three numbers: 20,15,22</h3>";
6     if($num1>$num2 && $num1>$num3) {
7         echo $num1;
8     }
9     else{
10        if($num2>$num1 && $num2>$num3) {
11            echo $num2;
12        }
13        else
14            echo $num3;
15    }
16 ?>
```

Output:-



localhost/Core_php_assignment/Prog_3.php

Largest of three numbers: 20,15,22

5. Write a program in PHP to print Fibonacci series. 0, 1, 1, 2, 3, 5, 8, 13, 21, o 34

The screenshot shows a code editor window with multiple tabs at the top labeled Prog_6.php, Prog_2.php, Prog_5.php, Prog_4.php, Prog_7.php, Prog_8.php, and Prog_3.php. The Prog_4.php tab is active. The code in the editor is:

```
1 <?php
2 $num = 0;
3 $n1 = 0;
4 $n2 = 1;
5 echo "<h3>Fibonacci series for first 12 numbers: </h3>";
6 echo "\n";
7 echo $n1.' '.$n2.' ';
8
9 while ($num < 10 )
10 {
11     $n3 = $n2 + $n1;
12     echo $n3.' ';
13     $n1 = $n2;
14     $n2 = $n3;
15     $num = $num + 1;
16 }
17 ?>
```

Output:-



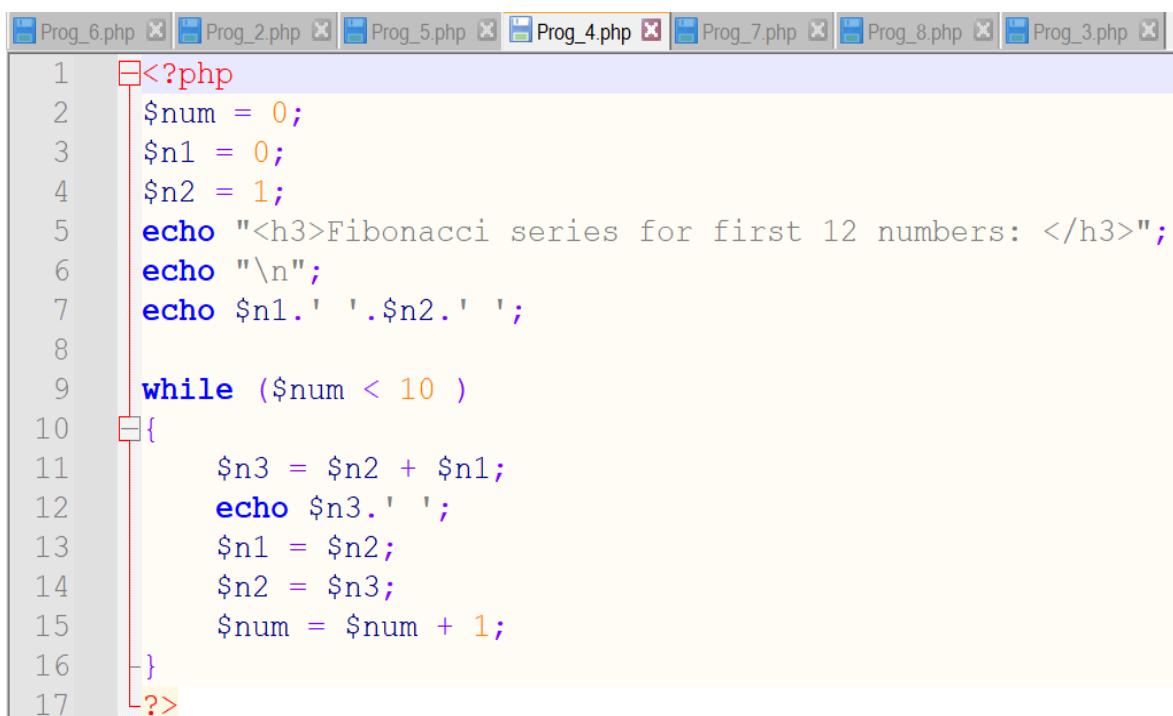
6. Write a program to find whether a number is Armstrong or not Write a program to print the below format :

5 9

2610

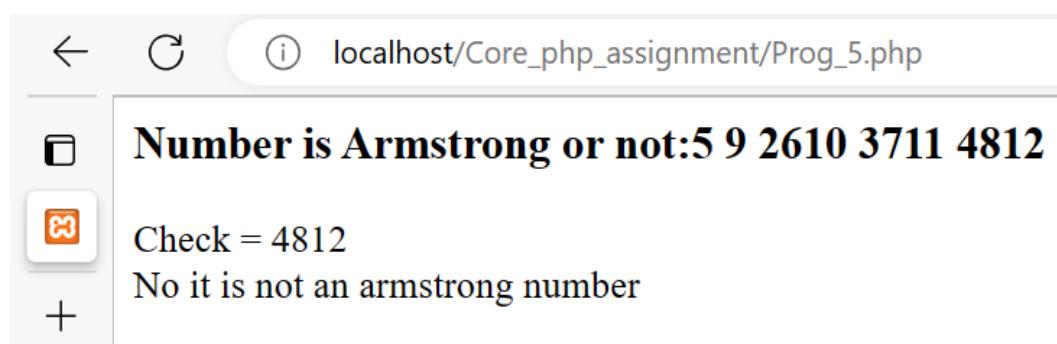
3711

4812



```
1 <?php
2 $num = 0;
3 $n1 = 0;
4 $n2 = 1;
5 echo "<h3>Fibonacci series for first 12 numbers: </h3>";
6 echo "\n";
7 echo $n1.' '.$n2.' ';
8
9 while ($num < 10 )
10 {
11     $n3 = $n2 + $n1;
12     echo $n3.' ';
13     $n1 = $n2;
14     $n2 = $n3;
15     $num = $num + 1;
16 }
17 ?>
```

Output:-



← ⏪ ⓘ localhost/Core_php_assignment/Prog_5.php

Number is Armstrong or not:5 9 2610 3711 4812

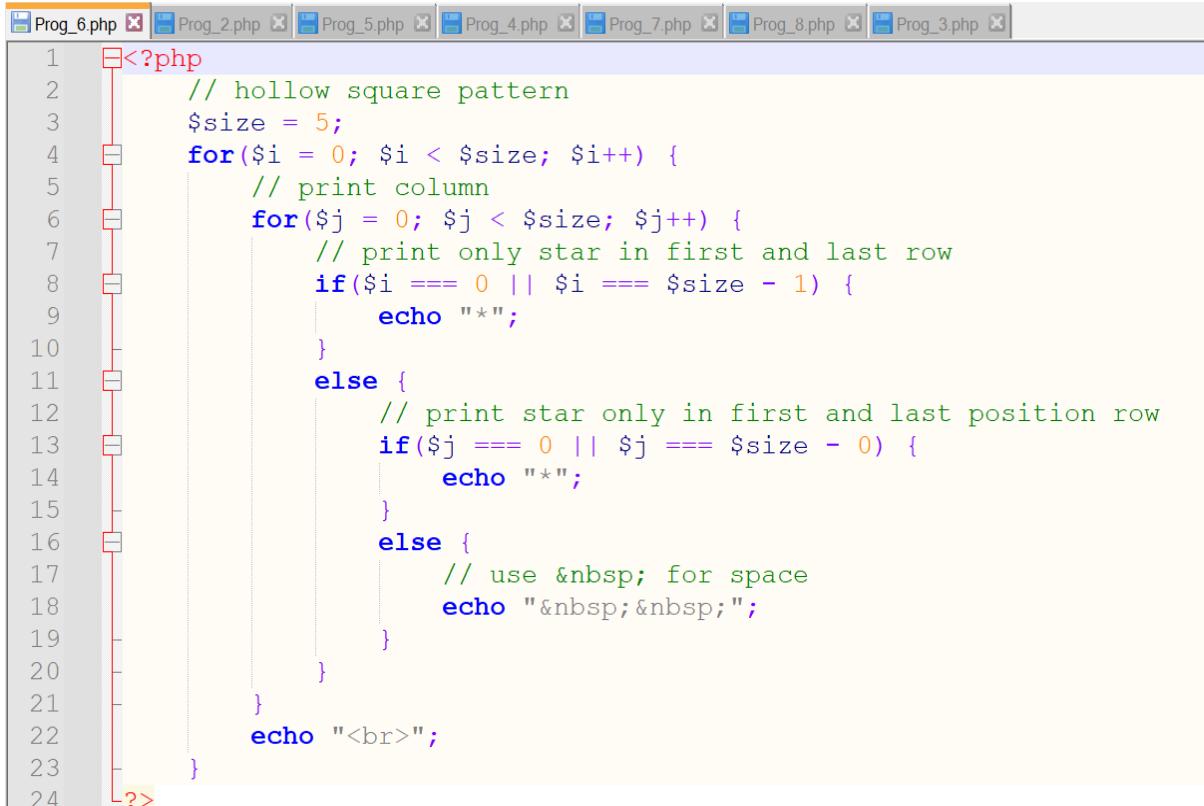
Check = 4812
No it is not an armstrong number

7. Write a program for this Pattern:

*

*

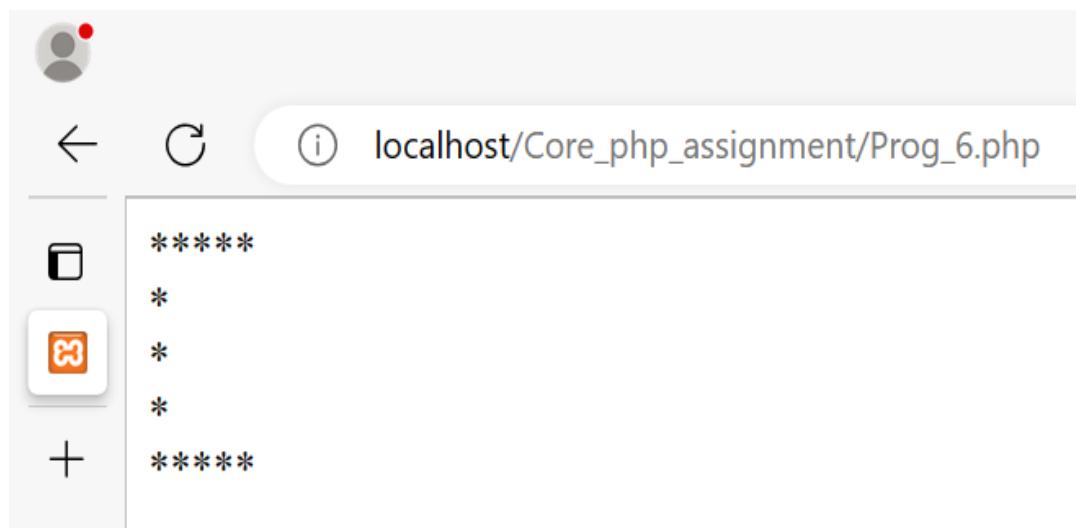
*



The screenshot shows a code editor window titled "Prog_6.php". The code is a PHP script that prints a hollow square pattern of stars. It uses nested loops: an outer loop for rows and an inner loop for columns. Special cases are handled for the first and last columns of each row. The code is as follows:

```
1 <?php
2     // hollow square pattern
3     $size = 5;
4     for($i = 0; $i < $size; $i++) {
5         // print column
6         for($j = 0; $j < $size; $j++) {
7             // print only star in first and last row
8             if($i === 0 || $i === $size - 1) {
9                 echo "*";
10            }
11            else {
12                // print star only in first and last position row
13                if($j === 0 || $j === $size - 1) {
14                    echo "*";
15                }
16                else {
17                    // use   for space
18                    echo " &ampnbsp";
19                }
20            }
21        }
22        echo "<br>";
23    }
24 ?>
```

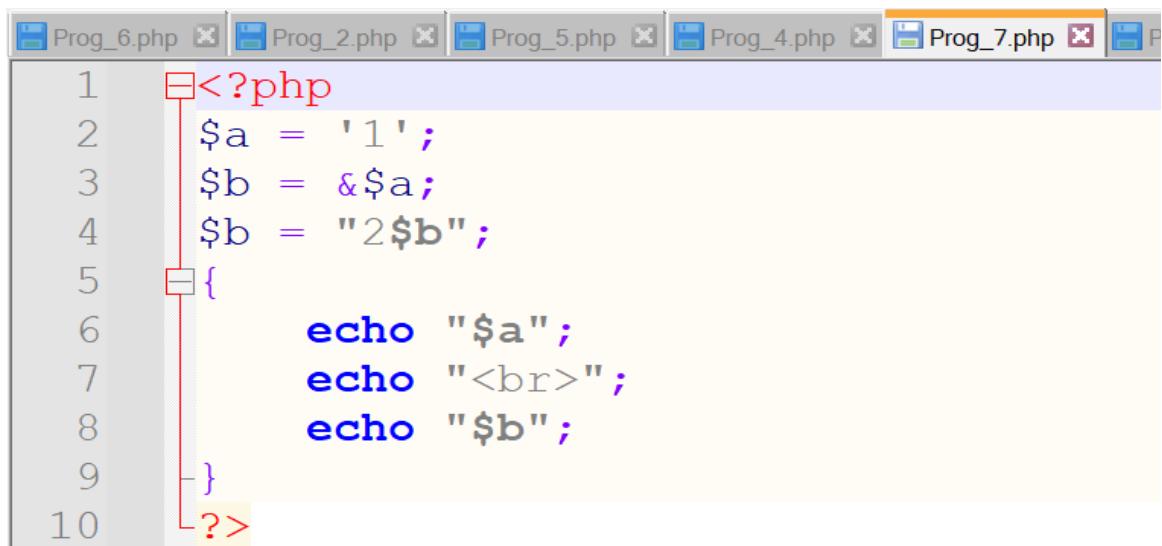
Output:-



```
*****  
*  
*  
*  
*****
```

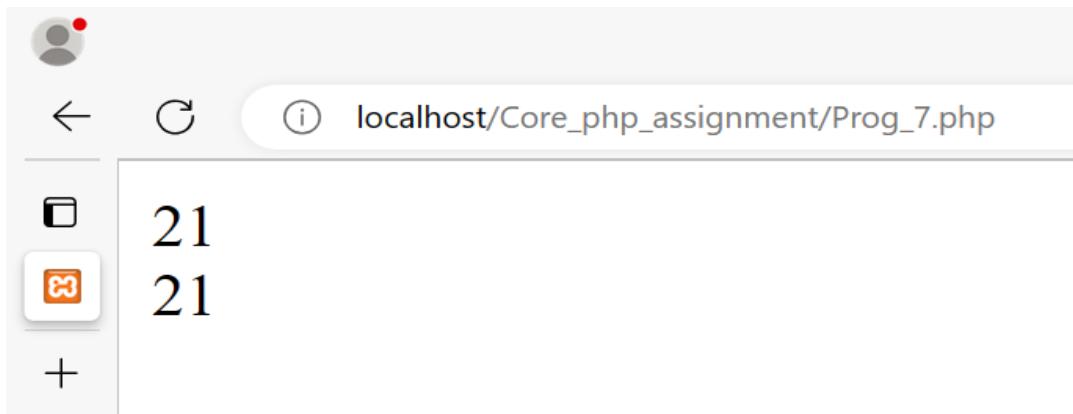
8. What will be the values of \$a and \$b after the code below is executed? Explain your answer.

```
$a = '1';  
$b = &$a;  
$b = "2$b";
```



```
1 <?php  
2 $a = '1';  
3 $b = &$a;  
4 $b = "2$b";  
5 {  
6 echo "$a";  
7 echo "<br>";  
8 echo "$b";  
9 }  
10 ?>
```

Output:-



9. How can you tell if a number is even or odd without using any Condition or loop?

```
1 <?php
2
3 $arr=array("0=>"Even","1=>"Odd");
4
5 $check=14;
6
7 echo "Check = 14"."<br>";
8 echo "Your number is: ".$arr[$check%2];
9
10 ?>
```

Output:-



localhost/Core_php_assignment/Prog_8.php



Check = 14



Your number is: Even

10. How can you declare the array (all type) in PHP?
Explain with example Convert a JSON string to array.

The screenshot shows a code editor window with a tab bar at the top containing files: Prog_14.php, Prog_11.php, Prog_9.php (highlighted in orange), Prog_13.php, Prog_10.php, and Prog_12.php. The main area displays a PHP script with line numbers from 1 to 43. The script demonstrates JSON decoding for three types of arrays: Numeric, Associative, and Multidimensional.

```
1 <?php
2
3 // 1. Numeric array:
4
5 $Fruits = array("Pineapple", "Grapes", "Pear");
6 {
7     $jsonstring = '["Pineapple", "Grapes", "Pear"]';
8
9     $array = json_decode($jsonstring);
10 }
11 echo "1. Numeric array: " .<br>;
12 echo $array[0] .<br>;
13 echo $array[1] .<br><br>;
14
15 // 2. Associative array:
16
17 $person = array("name" => "Janvi", "age" => 20, "city" => "Ahmedabad");
18 {
19     $jsonstring ='{"name": "Janvi", "age": 20, "city": "Ahmedabad"}';
20
21     $array = json_decode($jsonstring, true);
22 }
23 echo "2. Associative Array: " .<br>;
24 echo $array["name"] .<br>;
25 echo $array["age"] .<br>;
26 echo $array["city"] .<br><br>;
27
28 // 3. Multidemensional array:
29
30 $matrix = array( array(11, 12, 13),
31                 |           |           |
32                 |           |           |           array(14, 15, 16),
33                 |           |           |           array(17, 18, 19));
34 {
35     $jsonstring ='[[11, 12, 13], [14, 15, 16], [17, 18, 19]]';
36
37     $array = json_decode($jsonstring, true);
38 }
39 echo "3. Multidemensional Array: " .<br>;
40 echo $array[0][0] .<br>;
41 echo $array[1][2];
42
43 ?>
```

Output:-

1. Numeric array:
Pineapple
Grapes

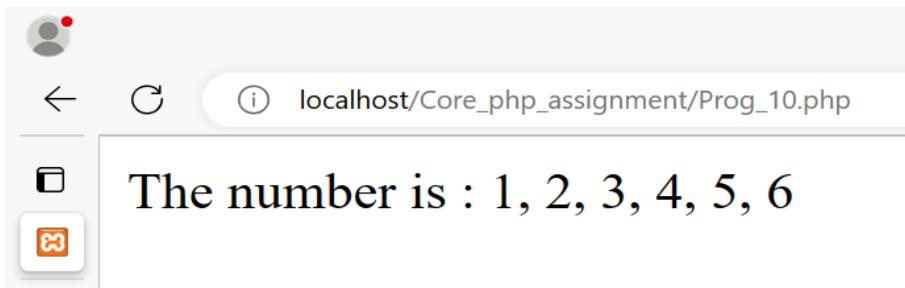
2. Associative Array:
Janvi
20
Ahmedabad

3. Multidemensional Array:
11
16

11. Write program to remove duplicate values from array

```
1 <?php
2
3     function removeDuplicates($arr)
4     {
5         $result = array();
6         foreach ($arr as $value)
7         {
8             if (!in_array($value, $result))
9             {
10                 $result[] = $value;
11             }
12         }
13
14     return $result;
15 }
16
17 $arr= array(1,1,2,3,4,5,5,6);
18 $result= removeDuplicates($arr);
19
20 echo "The number is : " . implode(', ', $result );
21
22 ?>
```

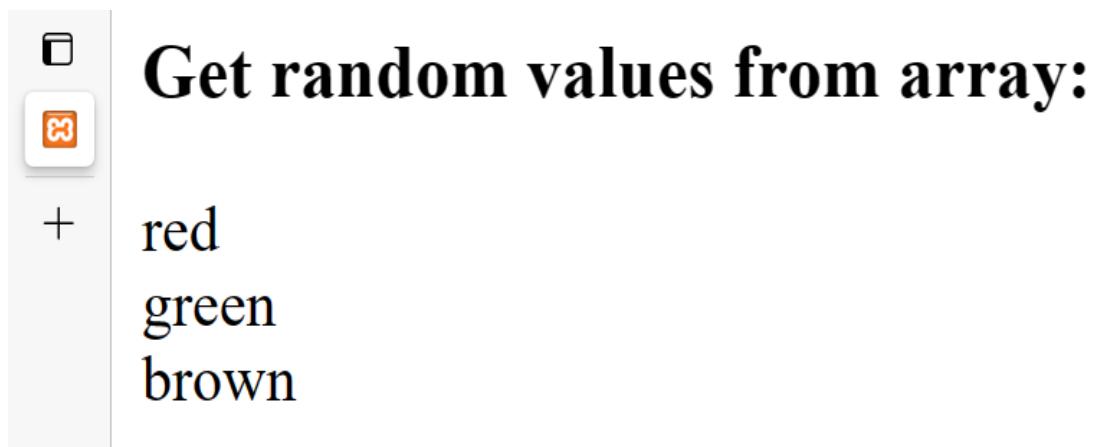
Output:-



12. Get random values from array.

```
1 <?php
2 $a=array("red","green","blue","yellow","brown");
3 $random_keys=array_rand($a,3);
4 echo "<h3> Get random values from array:</h3>";
5 echo $a[$random_keys[0]]."<br>";
6 echo $a[$random_keys[1]]."<br>";
7 echo $a[$random_keys[2]];
8 ?>
```

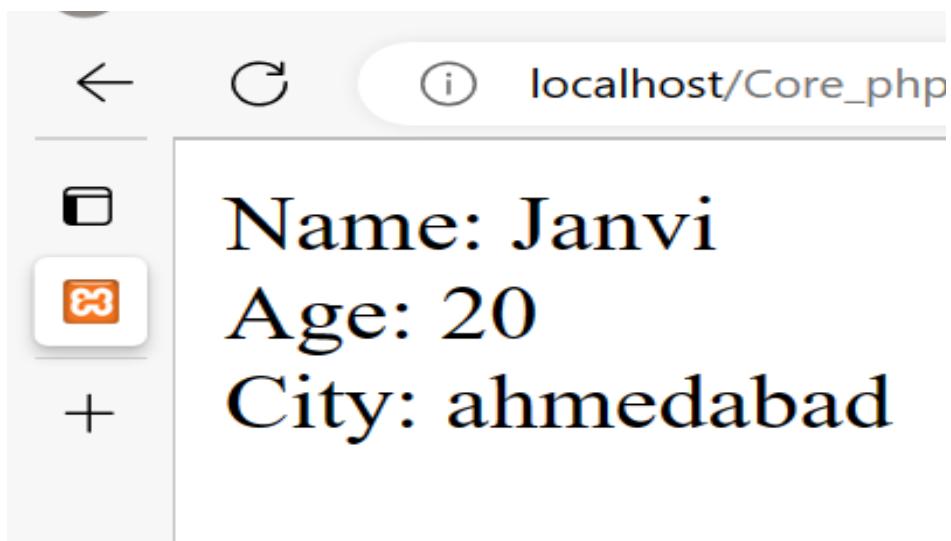
Output:-



13. Write a PHP script which decodes the following JSON string.

```
1 <?php
2 $jsonString = '{"name":"Janvi","age":20,"city":"ahmedabad"}';
3
4 $data = json_decode($jsonString);
5 if ($data === null && json_last_error() !== JSON_ERROR_NONE)
6 {
7     echo "Error decoding JSON: " . json_last_error_msg();
8 }
9 else{
10    echo "Name: " . $data->name .<br>;
11    echo "Age: " . $data->age .<br>;
12    echo "City: " . $data->city .<br>;
13 }
14 ?>
```

Output:-



14. Use a for loop to total the contents of an integer array called numbers which has five elements. Store the result in an integer called total.

```
1 <?php
2
3 $numbers = array(5,10,15,20,25);
4 $total_number=0;
5
6 for ($i = 0; $i < count($numbers); $i++)
7 {
8     $total_number += $numbers[$i];
9 }
10 echo "Total_number : " . $total_number;
11 ?>
```

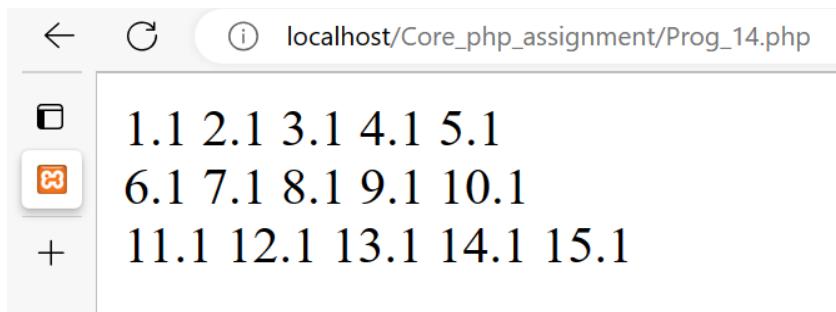
Output:-



15. Declare a Multi Dimensioned array of floats called balances having Three rows and five columns.

```
1 <?php
2
3 $balance = array(array(1.1, 2.1, 3.1, 4.1, 5.1),
4 | | | | |
5 | | | | | array(6.1, 7.1, 8.1, 9.1, 10.1),
6 | | | | |
7 | | | | | array(11.1, 12.1, 13.1, 14.1, 15.1));
8
9 for ($row = 0; $row < 3; $row++)
10 {
11     for ($col = 0; $col < 5; $col++)
12     {
13         echo $balance[$row][$col] . " ";
14     }
15     echo "<br>";
16 }
```

Output:-



The screenshot shows a web browser window with the URL `localhost/Core_php_assignment/Prog_14.php`. The page displays the output of the PHP code, which is a 3x5 grid of floating-point numbers:

1.1	2.1	3.1	4.1	5.1
6.1	7.1	8.1	9.1	10.1
11.1	12.1	13.1	14.1	15.1