

```
1. *  
   **  
   ***  
   ****
```

```
2. <?php  
3. // Pattern 1:  
4. //  
5. for ($i = 1; $i < 5; $i++) {  
6.     for ($j = 1; $j <= $i; $j++) {  
7.         echo "*";  
8.     }  
9.     echo "<br>";  
10. }  
11. ?>
```

```
2. ****
```

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

```
<?php  
for ($i = 1; $i <= 4; $i++) {  
    for ($j = 1; $j < $i; $j++) {  
        echo "&nbsp;";  
    }  
    for ($j = $i; $j <= 4; $j++) {  
        echo "*";  
    }  
    echo "<br>";  
}  
?>
```

```
3. *****
```

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

```
<?php  
$rows = 6;  
for ($i = $rows; $i >= 1; $i--) {
```

```

for ($k = 1; $k <= $rows - $i; $k++) {
    echo "&nbsp;";
}
for ($j = 1; $j <= (2 * $i) - 1; $j++) {
    echo "*";
}
echo "<br>";
}
?>

```

4. Prime or not

```

<?php
$num = 100;
$count = 0;
echo "Program to check " . $num . " is a prime number or not<br>";
for ($i = 1; $i <= $num; $i++) {
    if ($num % $i == 0) {
        $count++;
    }
}
if ($count == 2) {
    echo $num . " is a Prime Number";
}
else{
echo $num . " is not a Prime Number";
}

```

5. Palindrome

```

<?php
$num = 1112011;
$rev=0;
$copy = $num;
echo "To Check whether " . $num . " is Palindrome or not!<br>";
while (floor($copy)) {
    $rem = $copy % 10;
    $rev = $rev * 10 + $rem;
    $copy = $copy / 10;
}
if ($num == $rev) {
    echo $num . " is Palindrome number";
} else {
    echo $num . " is not Palindrome number";
}

```

```
}  
?>
```

6. Armstrong

```
<?php  
$num = 407;  
$total = 0;  
$copy = $num;  
while ($copy != 0) {  
    $rem = $copy % 10;  
    $total = $total + $rem * $rem * $rem;  
    $copy = $copy / 10;  
}  
if ($num == $total) {  
    echo $num." is an Armstrong number";  
} else {  
    echo $num." is not an armstrong number";  
}  
?>
```

7. Fibonacci

```
<?php  
$num = 0;  
$n1 = 0;  
$n2 = 1;  
echo "<h3>Fibonacci series for first 11 numbers: </h3>";  
echo "<br>";  
echo $n1 . ' ' . $n2 . ' ' ;  
while ($num < 9) {  
    $n3 = $n2 + $n1;  
    echo $n3 . ' ' ;  
    $n1 = $n2;  
    $n2 = $n3;  
    $num = $num + 1;  
}  
}
```