3b

```php
<? php
function is Divisible($number,$divisor){
if($divisor==0){
return "Cannot divide by zero!";
}elseif($number%$divisor==0){ return"$number is
divisible by $divisor";
}
else
{
return "$number is not divisible by $divisor";
}
}
$testNumber=20;
$divisor=5;
$result=isDivisible($testNumber,$divisor); echo
$result;
?>
```

4a

```php
<?php
function squareroot ($n,$1){
$x=$n;
$root;
$count=0 while(true){
$count++;
$root=0.5*($x+($x/$x));
```

```php
        if (abs($root-$x)<$1){

break;

}

$x=$root;

}

return $root;

}

$n=327;

$l=0.00001;

echo squareRoot ($n,$1);

?>
```

4b

```php
<?php

function generatefloydsTriangle($rows){

$number=1;

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

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

$number."";

$number++;

}

echo"<br>";

}

}

$rows=5;

generatefloydsTriangle($rows);

?>
```

5a

```php
<?php
function squareRoot($n,$l){
 $x=$n;
 $root;
 $count=0; while(true)
 {
  $count++;
  $root=0.5*($x+($n/$x)); if
  (abs($root-$x)<$l) { break;
  }
  $x=$root;
 }
 return $root;
}
$n=327;
$l=0.00001;
echo squareRoot ($n,$l);
?>
```

5b

```php
<?php
function quadraticRoots($a,$b,$c){
$delta=$b*$b-4*$a*$c;
if($delta>0){
$root1=(-$b+sqrt($delta))/(2*$a);
$root2=(-$b-sqrt($delta))/(2*$a);
echo "Roots are real and different.<br> Root1 =$root1<br>
```

```php
Root2=$root2";

}elseif($delta==0){

$root=-$b/(2*$a);

echo "Roots are real and the same.<br>Root=$root";

}else{

$realPart=-$b/ (2 * $a);

$imaginaryPart=sqrt(abs($delta))/(2*$a);

echo "Roots are complex.<br>Root1=$realPart+$imaginaryPart i<br>Root2=$realpart-$imaginaryPart i";

}

}

$a=2;

$b=4;

$c=3;

quadraticRoots($a,$b,$c);

?>
```

7

```php
<?php

function printFirstNLines($filename,$n){

$file=fopen($filename,"r"); if($file){

$i=0; while(($line=fgets($file))!==false&&$i<=$n){

echo $line;

$i++;

}

fclose($file);

}else{
```

```php
echo"Unable to open file:$filename";

}

}

function UpdateFileContent($filename,$content){

$file=fopen($filename,"a");

if($file){ fwrite($file,$content);

fclose($file);

echo"Content added successfully to:$filename";

}else{

echo"Unable to open file:$filename";

}

}

$filename="example.txt";

$linesToprint=5;

$newcontent="\n hello World.\n Dept of AIML.\n good morning.\n";

echo"Printing first $linesToPrint lines of $filename:\n";

printFirstNLines($filename,$linesToprint);

echo "\n\n";

echo"Updating $filename with newcontent:\n";

UpdateFileContent($filename,$newcontent);

?>
```

8

```php
<?php

function countWordFrequency($filename,$word){

$fileContent=file_get_contents($filename);

$fileContent=Strtolower($fileContent);
```

```php
$word=strtolower($word);

$wordsArray=str_word_count($fileContent,1);

$wordCount=array_count_values($wordsArray);

return isset($wordCount[$word])?$wordCount[$word]:0;

} if($_SERVER["REQUEST_METHOD"]=="POST"){

$wordToSearch=$_POST['word'];

$filename="sample.txt"; if(file_exists($filename)){

$frequency=countwordFrequency($filename,$wordToSearch);   echo"The word

'$wordToSearch'appears $frequency times in the files.";

}else{

echo"The file '$filename' does not exist.";

}

}

?>
```

```html
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>word Frequency Counter</title>

</head>

<body>

<h3>Word Frequency Counter</h3>

<form method ="POST"action=" ">

<lable for="Word">Enter a word to search for:</label>
```

```html
<input type="text"id="word"name="word"required>

<input type="submit"value="Submit">

</form>

</body>

</html>
```

6a
```php
<?php
date_default_timezone_set('UTC');
echo"current date and time:".date('Y-m-d H:i:s')."<br>";
echo"today's date:".date('Y-m-d')."<br>";
echo"day of week:".date('l')."<br>;
echo"Month:".date('F')."<br>";
echo"current time:".date('H:i:s')."<br>";
echo"12-hour format:".date('h:i:s A')."<br>";
echo"year:".date('Y')."<br>";
echo"month:".date('m')."<br>";
echo"day:".date('d')."<br>";
echo"hour:".date('H')."<br>";
echo"minute:".date('i')."<br>";
echo"second:".date('s')."<br>";
echo"current timeStamp:".time()."<br>";
$specific date=strtotime("2023-10-15");
echo"specific date:".date('Y-m-d',$specific date)."<br>";
?>
```

10a
```php
<?php
class Employee{
public $name;
public $id;
public $dept;
public $salary;
public $doj;
public function __construct($name,$id,$dept,$salary,$doj){
$this->name=$name;
$this->id=$id;
$this->dept=$dept;
$this->salary=$salary;
$this->doj=$doj;
}
public function display(){
echo"employee name:$this->name<br>";
echo"employee ID:$this->id<br>";
echo"employee department:$this->dept\n";
echo"employee salaryu:$this->salary\n";
echo"employee data of joining:$this->doj\n";
}
}
$employee1=new Employee("John Doe","E1001","IT",50000,"2023-09-15");
echo"employee data:\n";
$employee1->display();
?>
```

12
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>HTML Form</title>
</head>
<body>
    <form action="display.php" method="post">
        <label for="name">Name:</label><br>
        <input type="text" id="name" name="name"><br>
        <label for="email">Email:</label><br>
        <input type="email" id="email" name="email"><br>
        <input type="submit" value="Submit">
    </form>
</body>
</html>
```

```php
<?php
If($_SERVER["REQUEST_METHOD"]=="POST"){
$name=$_POST["name"]
$email=$_POST["email"]
echo"<h2>Form Data</h2>";
echo"<p>Name:$name</p>";
echo"<p>Email:$email</p>";
}else{
Echo"Error:form not submitted";
}
?>
```

11a
```php
<?php
function countAadhaarOccurences($text){
$pattern="/\b\d{4}\s?\d{4}\s?\d{4}\b/";
preg_match_all($pattern,$text,$matches);
return count($matches[0]);
}
$text="My Aadhaar number is 1234 5678 9012.Please note it down .Another Aadhaar number is 3456 2278 9275";
$occurences=countAadhaarOccurences($text);
echo"number of Aadhaar occurences:$occurences";
?>
```

11b
```php
<?php
function replacePattern($text,$pattern,$replacement){
$result=preg_replace($pattern,$replacement,$text);
return $result;
}
$text="The quick brown for jumps over the lazy dog.";
$pattern="/brown/";
$replacement="red";
$newText=replacePattern($text,$pattern,$replacement);
echo"Modified text:$newText";
?>
```

9a

```php
<?php
function filterArrayByKeyNames($inputArray,$KeyNames){
$outputArray=array();
foreach($inputArray as $Key=>$value){
if(!in_array($Key,$KeyNames)){
$outputArray[$Key]=$value;
}
}
return $outputArray;
}
$array1=array('c1'=>'red','c2'=>'green','c3'=>'white','c4'=>'black');
$array2=array('c1','c3');
$output=filterArrayByKeyNames($array1,$array2);
echo"array<br>(<br>";
foreach($output as $Key=>$value){
echo"[$Key]=>$value<br>";
}
echo")<br>";
?>
```