**JSD**

2020

**PHP, JAVA, C Programs**

**Practicals**

**By Yugapriya**

**SIMPLE PROGRAMS IN PHP**

**Programs in php**

**1)Write a program to find Armstrong Number :**

**File name: ”ams.php”**

<?php

function armstrongNo($num1)

{

$sum=0;

$num2=$num1;

$len=count(str\_split($num1));

while($num2!=0)

{

$d=$num2%10;

$sum+=(int)pow($d,$len);

$num2=$num2/10;

}

if($sum==$num1)

{

echo $num1." is Amstrong";

}

else

{

echo $num1." is not Amstrong";

}

}

?>

<html>

<head></head>

<body>

<?php

if(!isset($\_POST['submit']))

{

?>

<form method="post" action="ams.php">

Enter the number :<br>

<input type="text" name="num"size="4"/><br>

<input type="submit" name="submit"value="Submit"/><br>

</form>

<?php

}

else

{

$num=(int)$\_POST['num'];

armstrongNo($num);

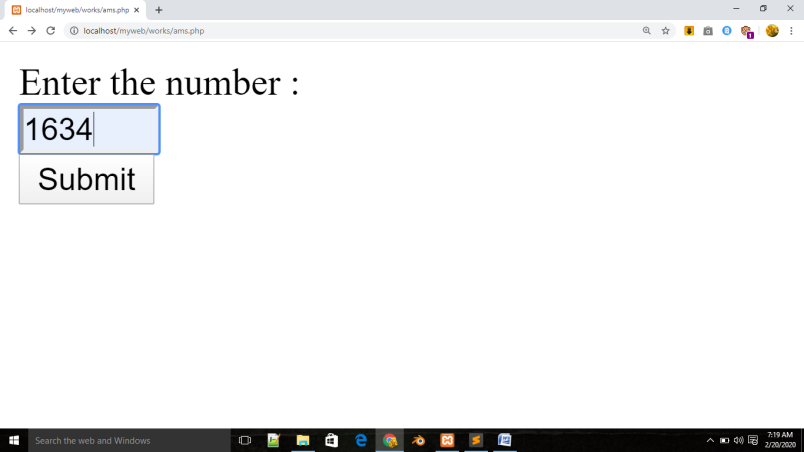
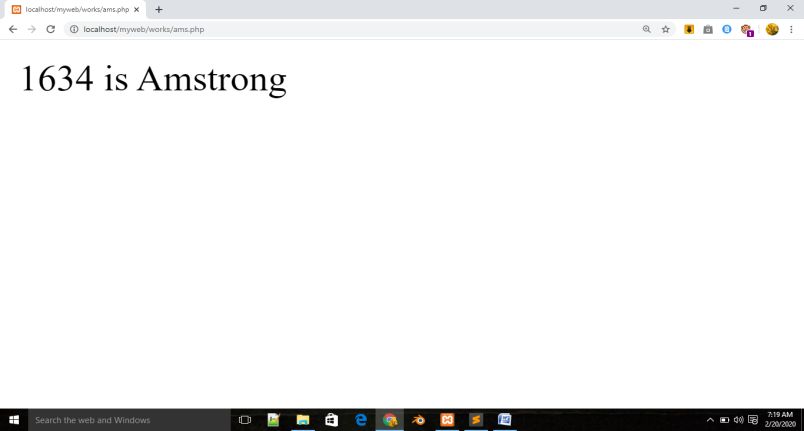
}

?>

</body>

</html>

**Output:**



**2)Write a program in php to find factorial of given number :**

**File name: “fact.php”**

<?php

function factorial($a)

{ $fact=1;

if($a<0)

{

echo "Error,Factorial of negative number doesn't exist....";

return -1;

}

else

{

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

{

$fact\*=$i;

}

return $fact;

}

}

?>

<html>

<head>

</head>

<body>

<h2>Factorial</h2>

<?php

if(!isset($\_POST['submit']))

{

?>

<form id="btn" method="post" action="fact.php">

Enter the number:<br/><br/>

<input type="text" name="num\_1" placeholder="Enter the number" size="20"/>

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

</form>

<?php

}

else

{

$num=(int)$\_POST['num\_1'];

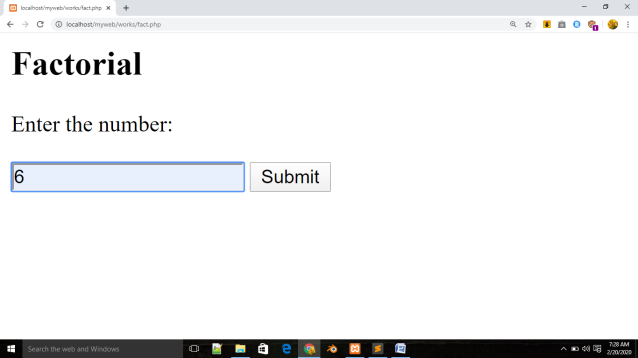
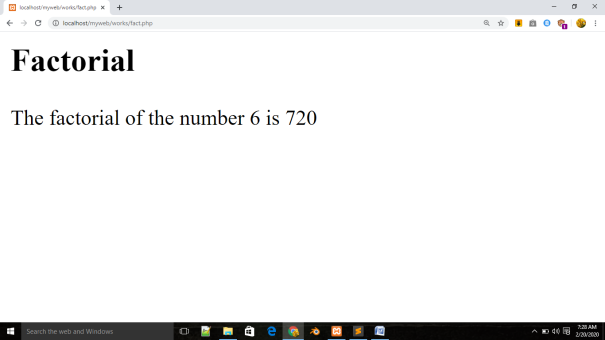
echo "The factorial of the number $num is ".factorial($num);

}

?>

</body>

</html>

**Output:**

**3)Write a program to find Fibonacci series in php:**

**File name: “fibo.php”**

<?php

function fibo($n)

{

$t1=0;

$t2=1;

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

{

echo $t1." ";

$nxt=$t1+$t2;

$t1=$t2;

$t2=$nxt;

}

}

?>

<html>

<head></head>

<body>

<?php

if(!isset($\_POST['submit']))

{

?>

<form method="post" action="fibo.php">

Enter the count for fibonacci Series :<br>

<input type="text" name="count"size="4"/><br>

<input type="submit" name="submit"value="Submit"/><br>

</form>

<?php

}

else

{

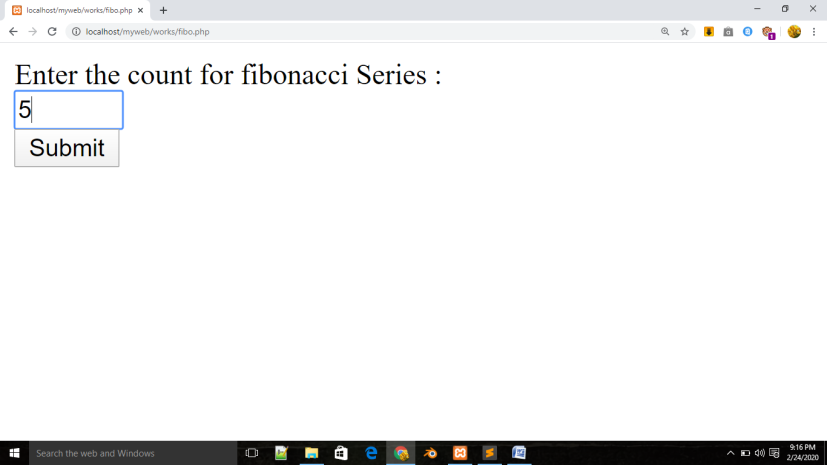
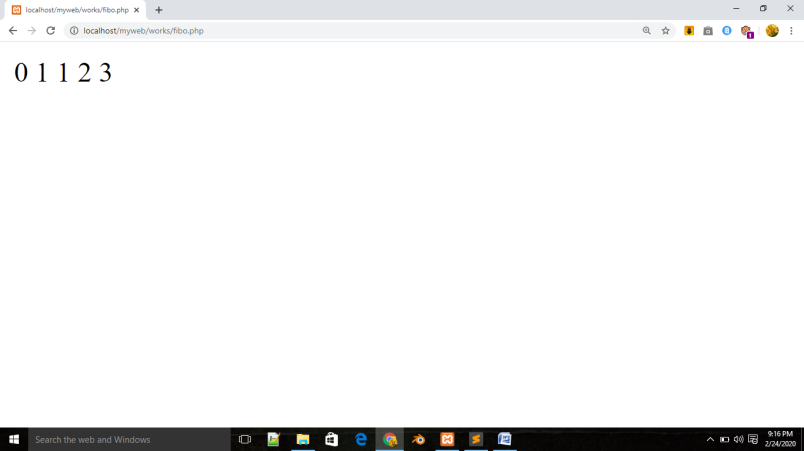
$num=(int)$\_POST['count'];

echo fibo($num);

}

?>

**Output:**

****

**4)Write a program to calculate simple interest in php:**

**File name: “interest.php”**

<html>

<body>

<font face="arial">

<h3><b><i>Calculate simple interest</i></b></h3>

<?php

$interest=2.12;

?>

<?php

$principle=3000;

$no\_of\_years=3;

$simple\_interest=($principle\*$no\_of\_years\*$interest)/100;

print"<hr>";

print"Principle=$principle<br>";

print"Years=$no\_of\_years<br>";

print"Simple Interest=$simple\_interest<br>";

print"<hr>";

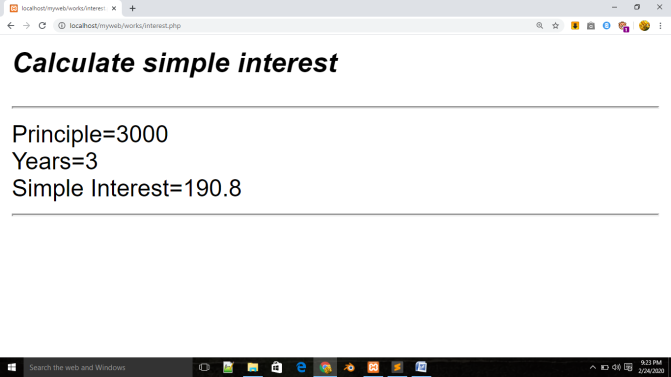
?>

</font>

</body>

</html>

**Output:**



**5)Write a program to find the second largest number in php:**

**Filename: “largestNum.php”**

<html>

<head></head>

<body>

<?php

if(!isset($\_POST['submit']))

{

?>

<form method="post" action="aray.php">

Enter the number to sort:<br>

<input type="text" name="num"size="4"/><br>

<input type="submit" name="submit"value="Submit"/><br>

</form>

<?php

}

else

{

$numStr=$\_POST['num'];

$numArr=explode(',',$\_POST['num']);

rsort($numArr);

echo"The given numbers: ".$numStr."<br>";

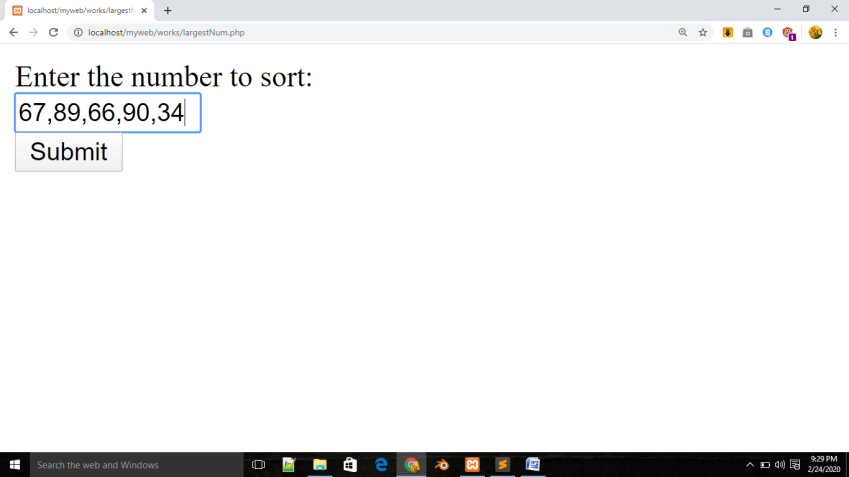
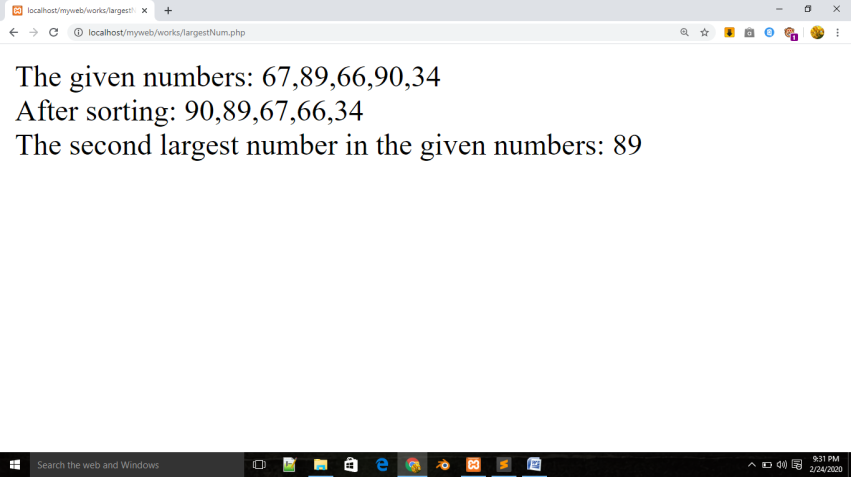
echo"After sorting: ".implode($numArr,',')."<br>";

echo"The second largest number in the given numbers: ".$numArr[1];

}

?>

**Output:**

****

**6)Write a program to find the leap year in php:**

**Filename: “leap.php”**

<?php

function leapOrnot($yr)

{

if($yr%4==0)

{

echo $yr." is leap year";

}

else

{

echo $yr." is not leap year";

}

}

?>

<html>

<head></head>

<body>

<?php

if(!isset($\_POST['submit']))

{

?>

<form method="post" action="leap.php">

Enter the year :<br>

<input type="text" name="year"size="4"/><br>

<input type="submit" name="submit"value="Submit"/><br>

</form>

<?php

}

else

{

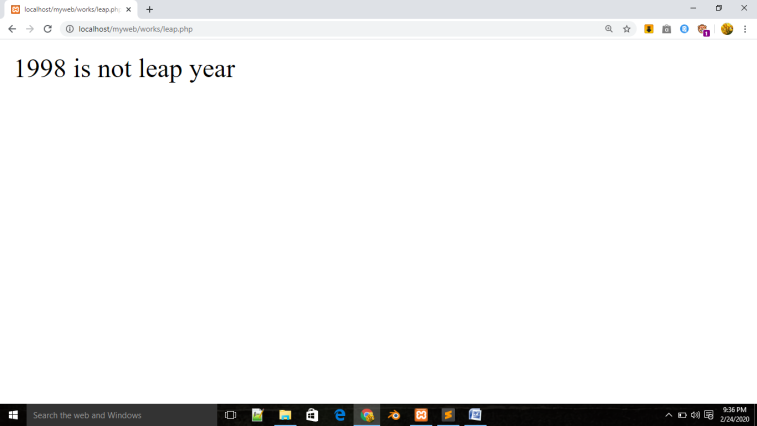
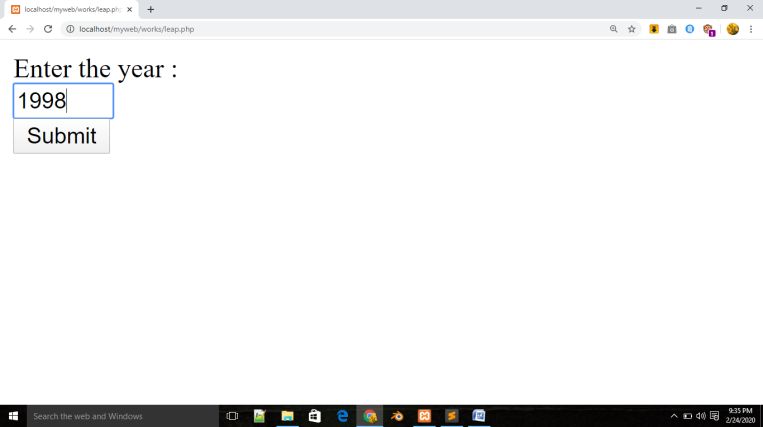
$yr=(int)$\_POST['year'];

leapOrnot($yr);

}

?>

**Output:**

****

**7)Write a program to find whether a number is palindrome or not in php:**

**Filename: “palindrome.php”**

<?php

function palinNum($num)

{

$rev=0;

$num2=$num;

while($num2!=0)

{

$d=$num2%10;

$rev=($rev\*10)+$d;

$num2=(int)($num2/10);

}

if($rev===$num)

{

echo"$num is palindrome";

}

else

{

echo"$num is not a palindrome";

}

}

?>

<html>

<head></head>

<body>

<?php

if(!isset($\_POST['submit']))

{

?>

<form method="post" action="palindrome.php">

Enter the number to find palindrome or not :<br>

<input type="text" name="num"size="4"/><br>

<input type="submit" name="submit"value="Submit"/><br>

</form>

<?php

}

else

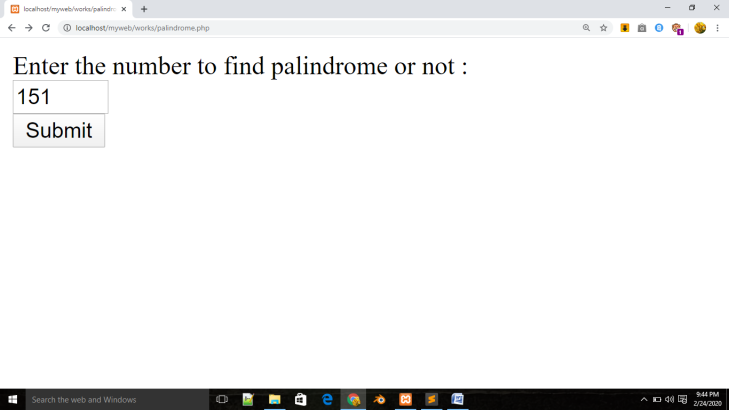
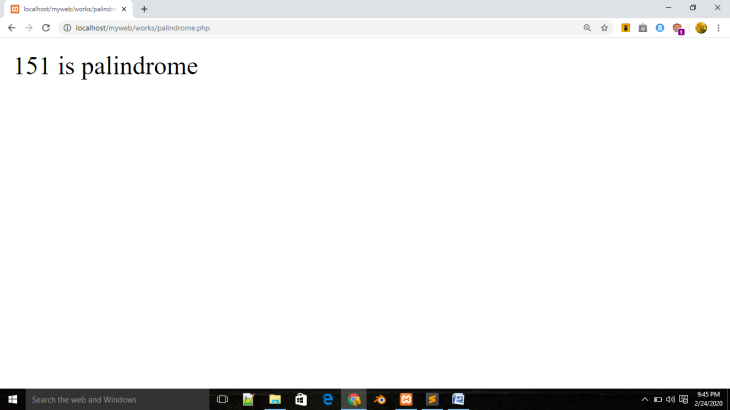
{

$num1=(int)$\_POST['num'];

palinNum($num1);

} ?>

**Output:**

****

**8)Write a program to print patterns in php:**

**Filename: “pattern.php”**

<?php

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

{

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

{

echo" \* ";

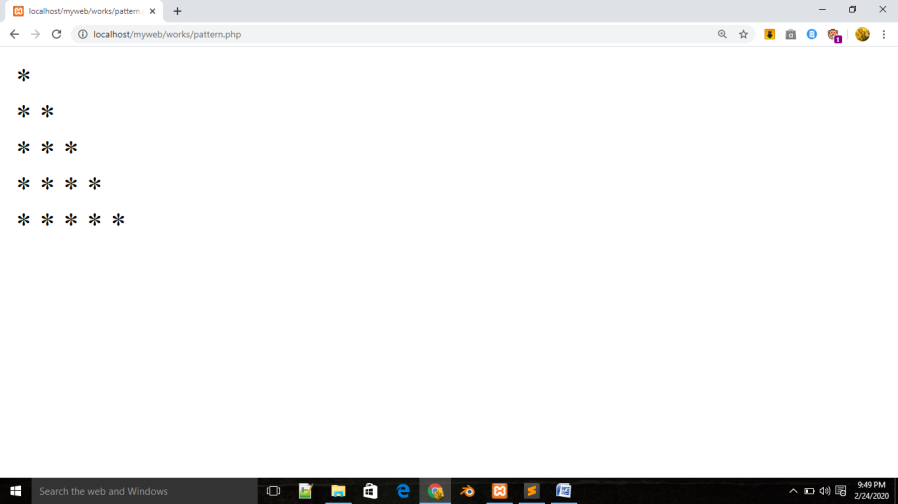
}

echo"<br>";

}

?>

**Output:**

****

**9)Write a program to find whether a number is prime or not in php:**

**Filename: “prime.php”**

<?php

function isPrime($n)

{

$count=0;

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

{

if($n%$i==0)

{

$count++;

}

}

return $count;

}

?>

<html>

<head></head>

<body>

<?php

if(!isset($\_POST['submit']))

{

?>

<form method="post" action="prime.php">

Enter the number :<br>

<input type="text" name="num"size="4"/><br>

<input type="submit" name="submit"value="Submit"/><br>

</form>

<?php

}

else

{

$no=(int)$\_POST['num'];

$flag=isPrime($no);

if($flag==2)

{

echo $no." is Prime";

}

else

{

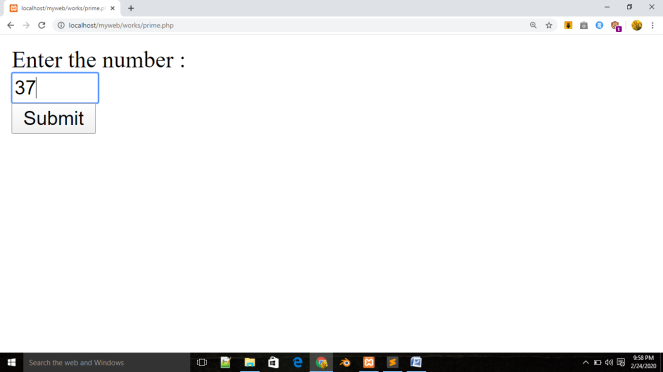
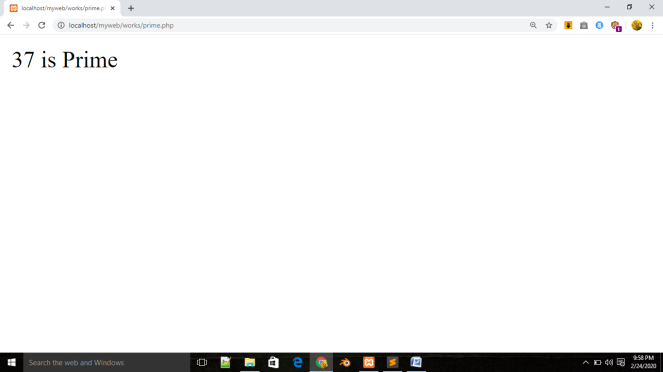
echo $no." is not Prime";

}

}

?>

**Output:**

****

**10)Write a program to print patterns in alphabets in php:**

**Filename: “alph.php”**

<?php

$alpha=range('A','Z');

for($i=0;$i<5;$i++)

{

for($j=4;$j>=$i;$j--)

{

echo $alpha[$j];

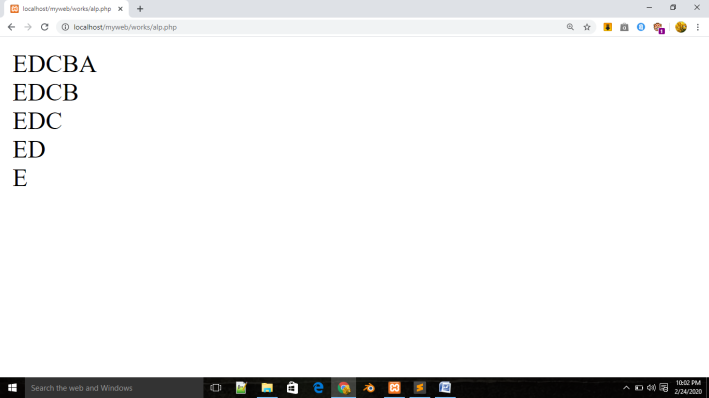
}

echo "<br>";

}

?>

**Output:**



**11)Write a program to validate email in php:**

**Filename: “email.php”**

<?php

function checkEmail($email)

{

if(filter\_var($email,FILTER\_VALIDATE\_EMAIL))

{

echo"$email is valid";

}

else

{

echo "$email is not valid";

}

}

?>

<html>

<head>

</head>

<body>

<h2>Email</h2>

<?php

if(!isset($\_POST['submit']))

{

?>

<form method="post" action="email.php">

Enter the number:<br/><br/>

<input type="email" name="email" placeholder="Enter the email address" size="20"/>

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

</form>

<?php

}

else

{

$email=$\_POST['email'];

echo checkEmail($email);

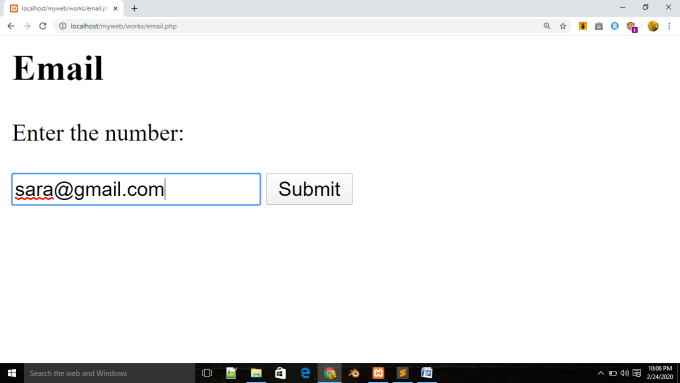
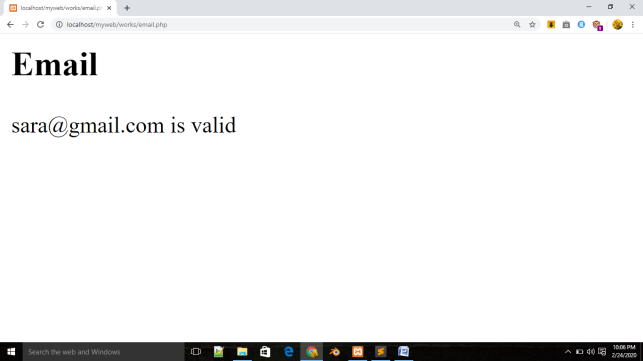
}

?>

</body>

</html>

**Output:**

****

**12)Write a program to compare whether strings are equal or not in php:**

**Filename: “equalstr.php”**

<html>

<head></head>

<body>

<?php

if(!isset($\_POST['submit']))

{

?>

<form method="post" action="equalstr.php">

Enter the Strings :<br>

<input type="text" name="str\_1"size="4"/><br>

<input type="text" name="str\_2"size="4"/><br>

<input type="submit" name="submit"value="Submit"/><br>

</form>

<?php

}

else

{

$str1=$\_POST['str\_1'];

$str2=$\_POST['str\_2'];

if($str1==$str2)

{

echo "Strings are equal";

}

else

{

echo "Strings are not equal";

}

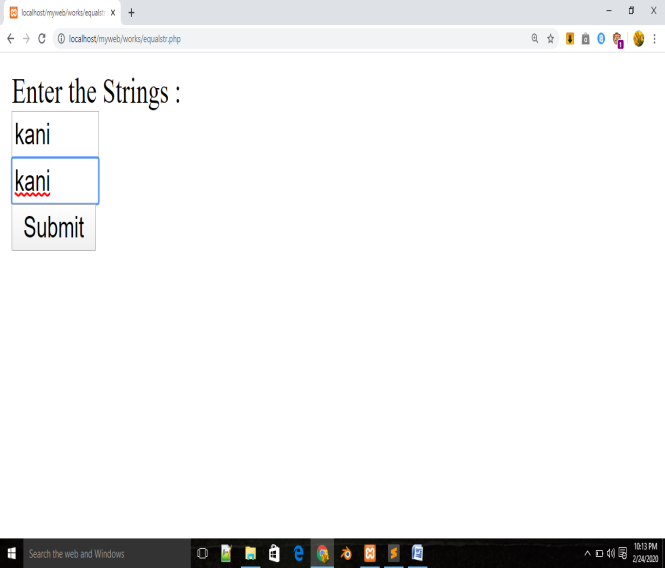
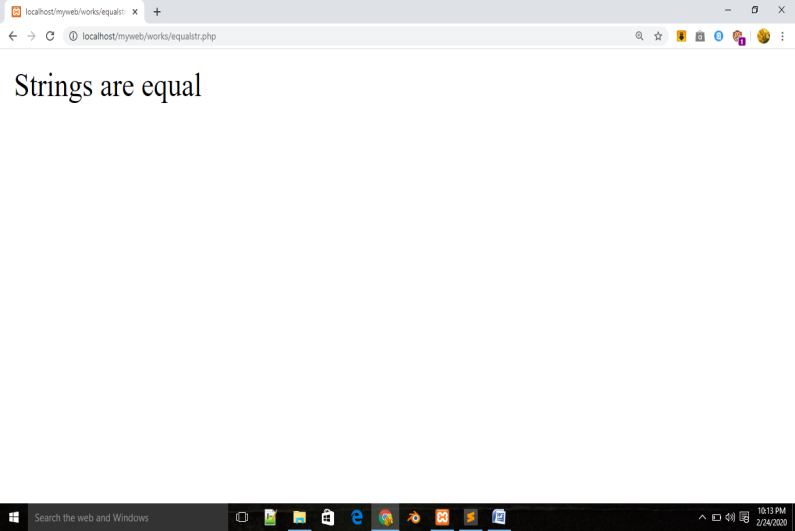
}

?>

</body>

</html>

**Output:**

****

**13)Write a program to perform arithmetic operation in php:**

**Filename: “calc.php”**

<?php

class calculator

{

private $num1;

private $num2;

private $operator;

public function getNum1($a)

{

$this->num1=$a;

return $this->num1;

}

public function getNum2($b)

{

$this->num2=$b;

return $this->num2;

}

public function getOperator($operat)

{

$this->operator=$operat;

return $this->operator;

}

public function performArith()

{

if($this->operator=='+')

{

return $this->num1+$this->num2;

}

else if($this->operator=='-')

{

return $this->num1-$this->num2;

}

else if($this->operator=='\*')

{

return $this->num1\*$this->num2;

}

else if($this->operator=='/')

{

return $this->num1/$this->num2;

}

else

{

return -1;

}

}

}

?>

<html>

<head>

<title>Calculator</title>

<style>

body

{

background:powderblue;

}

#btn

{

border:solid gray 1px;

width:20%;

border-radius:5px;

margin:100px auto;

background:yellow;

padding:50px

}

#frm{

color:#fff;

background:#337ab7;

padding:5px;

margin-left:69% ;

}

</style>

</head>

<body>

<h2>Calculator</h2>

<h3>Arithmetic Operation</h3>

<?php

if(!isset($\_POST['submit']))

{

?>

<form id="btn" method="post" action="calc.php">

Enter two integer:<br/><br/>

<input type="text" name="num\_1" placeholder="Enter the number1" size="20"/>

<select name="operation">

<option value="+">+</option>

<option value="-">-</option>

<option value="\*">\*</option>

<option value="/">/</option>

</select>

<input type="text" name="num\_2" placeholder="Enter the number2"size="20"/><br>

<input type="submit" name="submit" id="frm" value="Submit"/>

</form>

<?php

}

else

{

$no1=(int)$\_POST['num\_1'];

$no2=(int)$\_POST['num\_2'];

$op=$\_POST['operation'];

$calc=new calculator();

echo "The number 1: ".$calc->getNum1($no1)."<br>";

echo "The number 2: ".$calc->getNum2($no2)."<br>";

echo "The result of operation ".$calc->getOperator($op)." is ".$calc->performArith()."<br>";

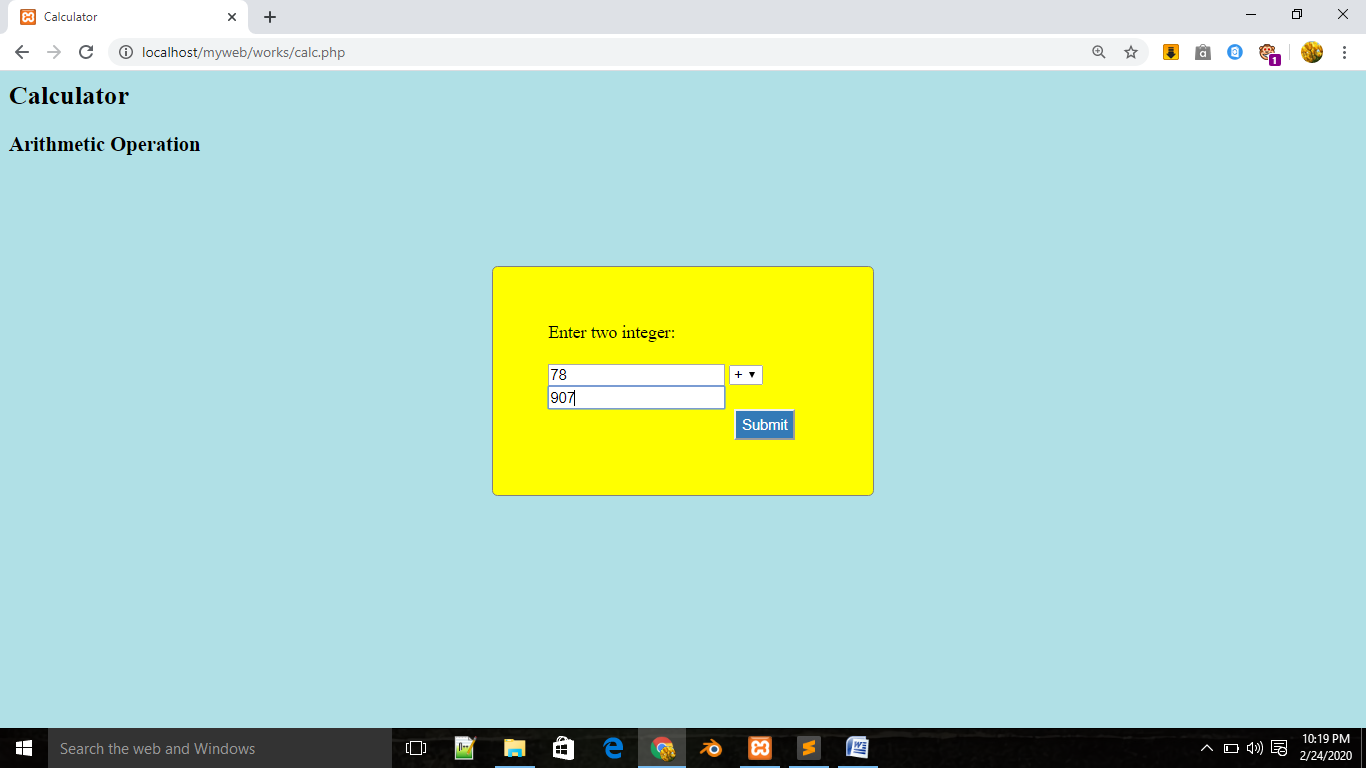
}

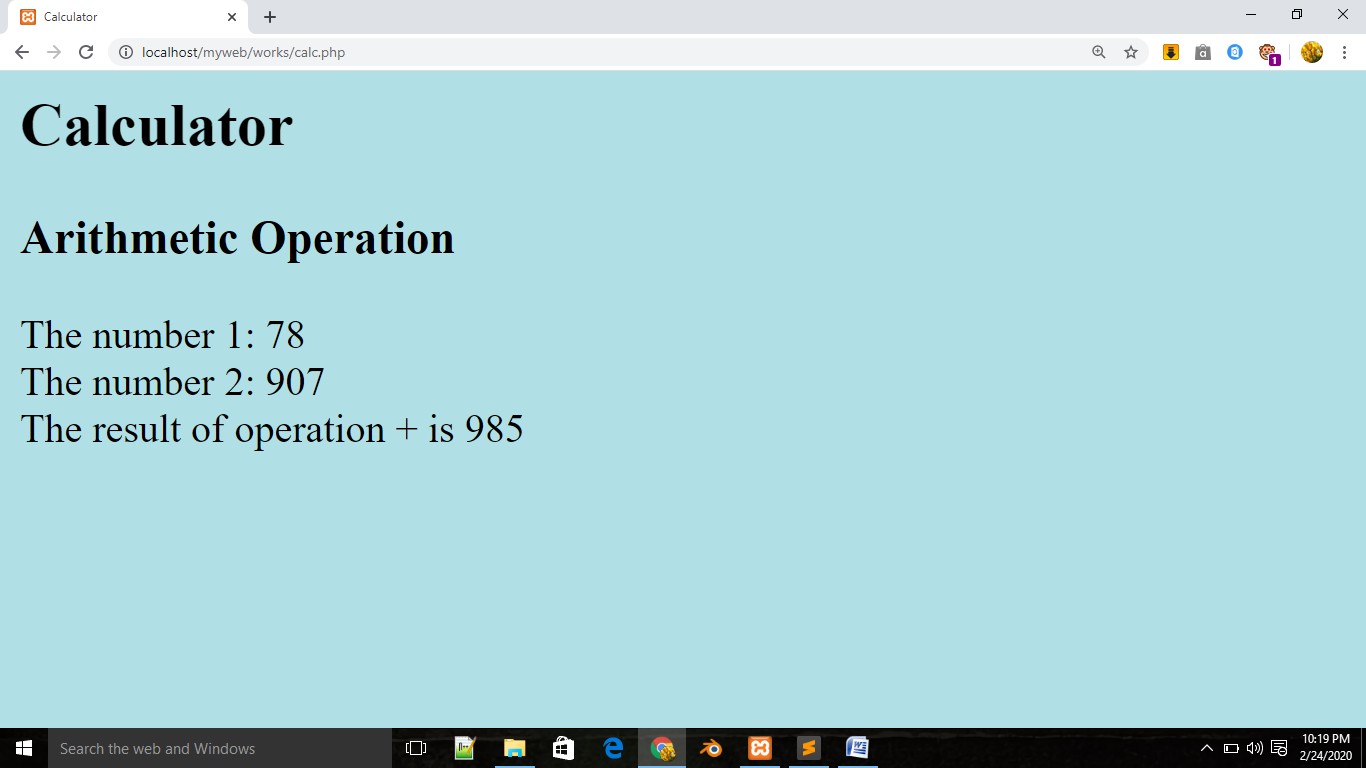
?>

</body>

</html>

**Output:**

****



**14)Design a simple login page in php with database connection:**

**Filename: “login.php”**

<html>

<head>

<title>Login Page

</title>

<link rel="stylesheet" type="text/css" href="style.css">

</head>

<body>

<div id="frm">

<form action="process.php" method="POST">

<p>

<label>Username:</label>

<input type="text" id="user" name="user"/>

</p>

<p>

<label>Password:</label>

<input type="password" id="pass" name="pass"/>

</p>

<p>

<input type="submit" id="btn" value="Login"/>

</p>

</form>

</div>

</body>

</html>

**Filename: “process.php”**

<html>

<head>

<style>

#dm

{

background:#eee;

}

#sn

{

border:solid gray 1px;

width:20%;

border-radius:5px;

margin:100px auto;

background:white;

padding:50px;

}

</style>

</head>

<body id="dm">

<?php

//get values from form in login.php

$username=$\_POST['user'];

$password=$\_POST['pass'];

$mysqli=new mysqli("localhost","root","","mash");

if($mysqli === false){

die("Error:Could not connect.".mysqli\_connect\_error());

}

//Quey the database for user

$sql=("select \* from user\_login where username='$username' and password='$password'");

$result=$mysqli->query($sql);

$row=$result->fetch\_array();

if($row["username"]==$username && $row["password"]==$password)

{

echo'<div id="sn">You are a validate user</div>';

}

else

{

echo'<div id="sn">Youu are not validate user...Please try again</div>';

}

$result->close();

$mysqli->close();

?>

</body>

</html>

**Filename: “style.css”**

body{

background:#eee;

}

#frm{

border:solid gray 1px;

width:20%;

border-radius:5px;

margin:100px auto;

background:white;

padding:50px

}

#btn{

color:#fff;

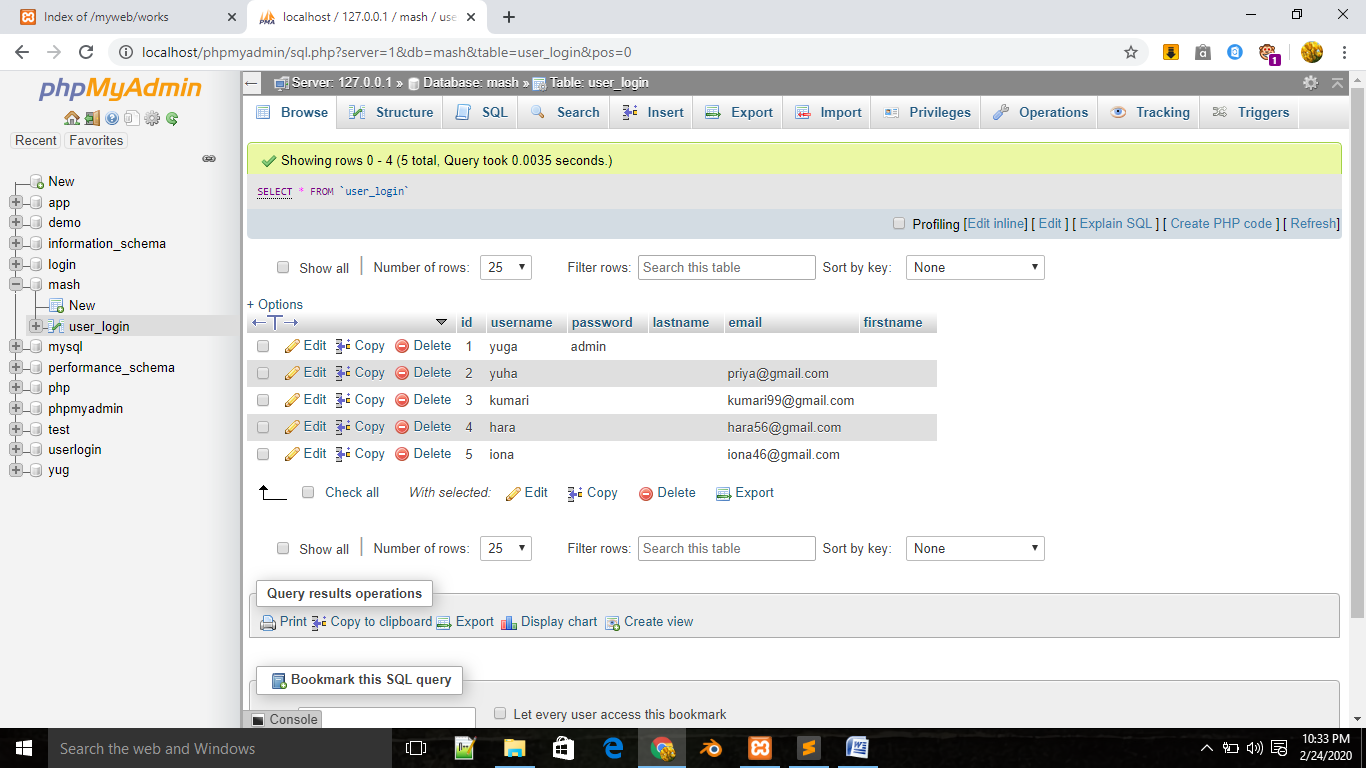
background:#337ab7;

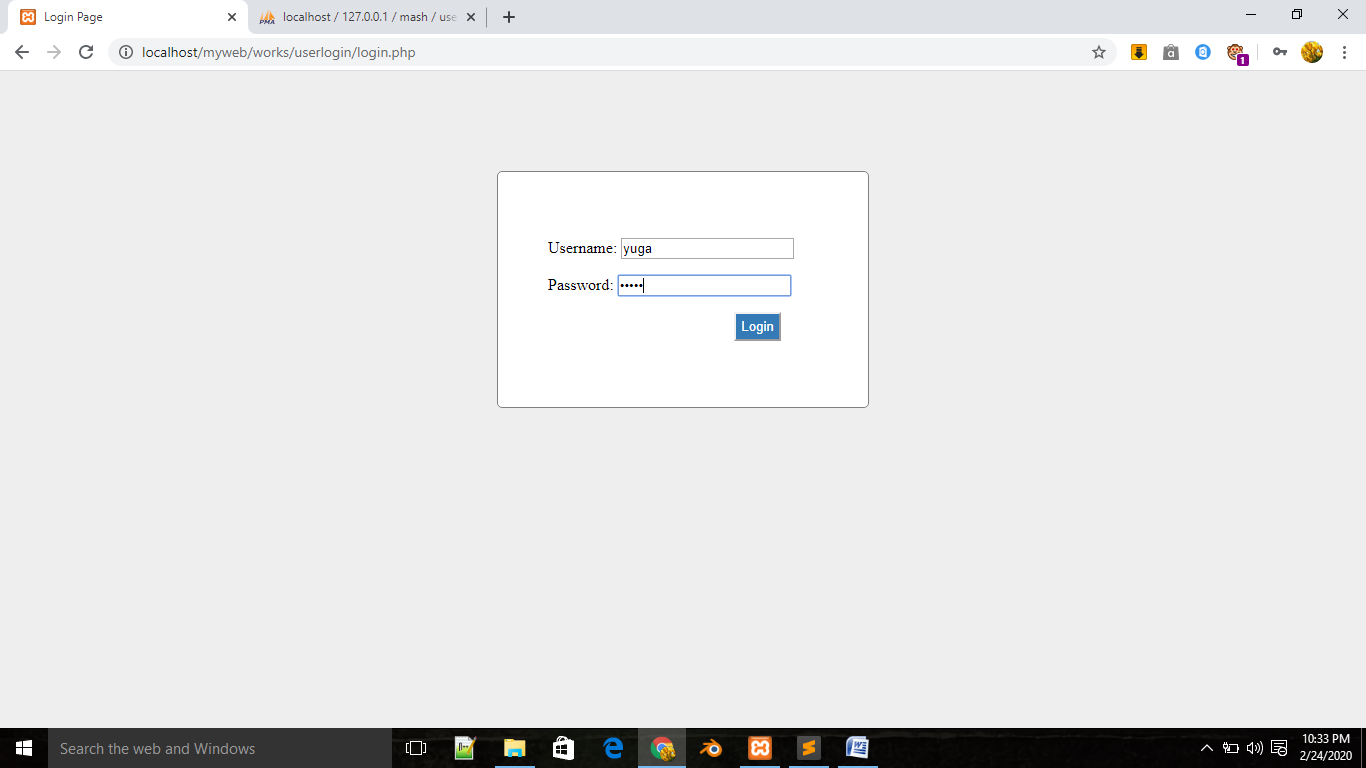
padding:5px;

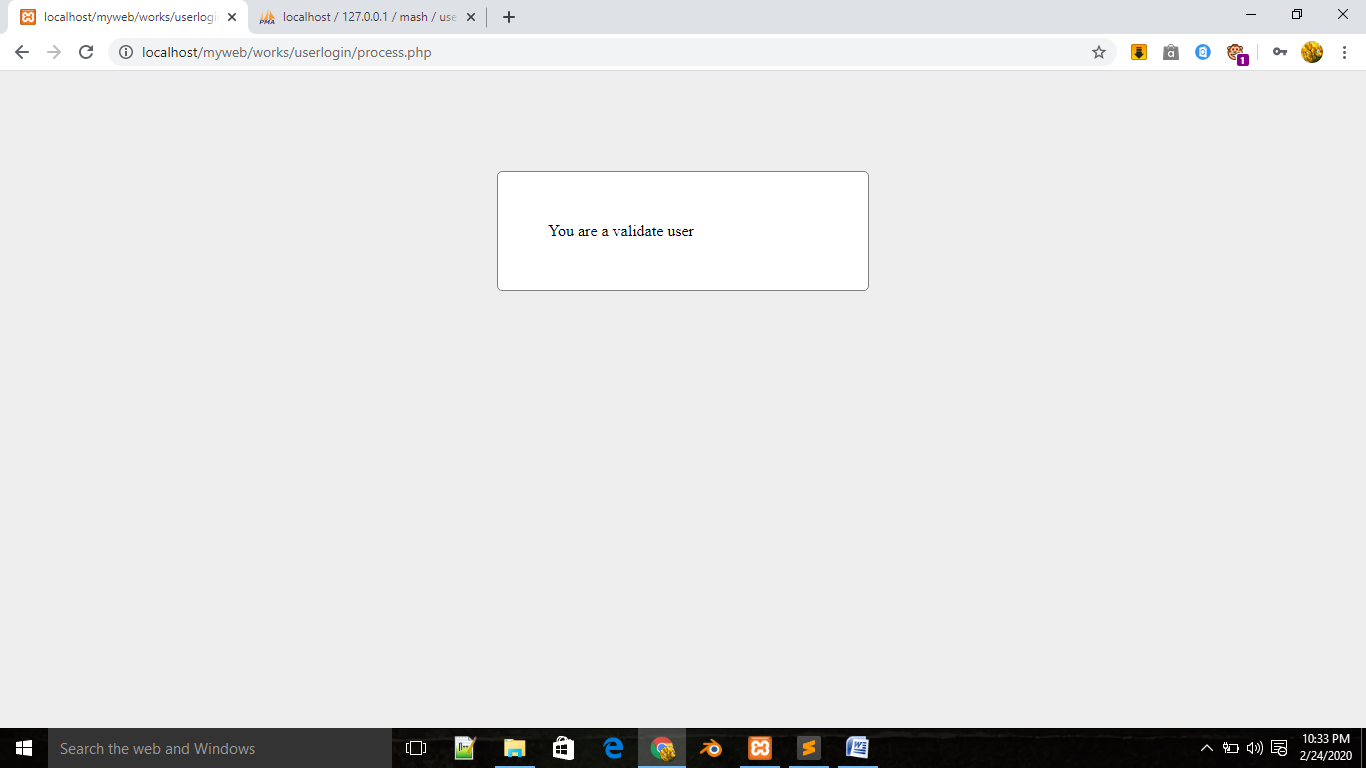
margin-left:69%;

}

**Output:**

****

****

****

**SIMPLE JAVA PROGRAMS**

**1)Write a program to find Armstrong number in java:**

import java.util.Scanner;

import java.lang.Math;

public class ams

{

public static void main(String args[])

{

int num1,num2,num3,d,sum=0;

int len=0;

Scanner sc=new Scanner(System.in);

System.out.println("Enter the number:");

num1=sc.nextInt();

sc.close();

num2=num1;

num3=num1;

while(num3!=0)

{

num3=num3/10;

len++;

}

while(num2!=0)

{

d=num2%10;

sum+=Math.pow(d,len);

num2=num2/10;

}

if(sum==num1)

{

System.out.println(num1+" is Amstrong");

}

else

{

System.out.println(num1+" is not Amstrong");

}

}

}

**2)Write a program to find average of numbers in java:**

import java.util.Scanner;

public class average

{

public static void main(String[]args)

{

int n1,n2,n3;

double avg;

Scanner sc=new Scanner (System.in);

System.out.println("Enter the first number:");

n1=sc.nextInt();

System.out.println("Enter the second number:");

n2=sc.nextInt();

System.out.println("Enter the third number:");

n3=sc.nextInt();

sc.close();

avg=(n1+n2+n3)/3.0;

System.out.println("The average is: "+avg);

}

}

**3)Write a program to validate date in java:**

import java.util.Scanner;

public class date

{

public static void main(String[]args)

{

int dd,mm,yy;

Scanner sc=new Scanner(System.in);

System.out.println("Enter the date:(dd mm yyyy)");

dd=sc.nextInt();

mm=sc.nextInt();

yy=sc.nextInt();

if(yy>=1000 && yy<=9999)

{

if(mm>=1 && mm<=12)

{

if((dd>=1 && dd<=31)&&(mm==1||mm==3||mm==5||mm==7||mm==8||mm==10||mm==12))

{

System.out.println("The date is valid");

}

else if((dd>=1 && dd<=30)&&(mm==4||mm==6||mm==9||mm==11))

{

System.out.println("The date is valid");

}

else if((dd>=1 && dd<=28)&&(mm==2))

{

System.out.println("The date is valid");

}

else

{

System.out.println("The date is invalid");

}

}

else

{

System.out.println("The month is invalid");

}

}

else

{

System.out.println("The year is invalid");

}

}

}

**4)Write a program to find whether the strings are equal or not in java:**

import java.util.Scanner;

public class equal

{

public static void main(String[]args)

{

String str1,str2;

boolean isEqual=false;

System.out.println("Enter the string1:");

Scanner sc=new Scanner(System.in);

str1=sc.nextLine();

System.out.println("Enter the String2:");

str2=sc.nextLine();

sc.close();

if(str1.equals(str2))

{

isEqual=true;

}

if(isEqual)

{

System.out.println("The strings are equal");

}

else

{

System.out.println("The strings are not equal");

}

}

}

**5)Write a program to find whether a number is even or not in java:**

import java.util.Scanner;

public class evenor

{

public static void main(String[]args)

{

boolean isEven;

int num;

Scanner sc=new Scanner(System.in);

System.out.println("Enter the number:");

num=sc.nextInt();

sc.close();

if(num%2==0)

{

isEven=true;

}

else

{

isEven=false;

}

if(isEven)

{

System.out.println(num+" is even number");

}

else

{

System.out.println(num+" is not even number");

}

}

}

**6)Write a program to find the factorial of given number in java:**

import java.util.Scanner;

public class fact

{

public static void main(String[]args)

{

int n,i;

long fact=1;

Scanner sc=new Scanner(System.in);

System.out.println("enter the number");

n=sc.nextInt();

sc.close();

if(n<=0)

{

System.out.println("Error");

}

else

{

for(i=1;i<=n;i++)

{

fact\*=i;

}

}

System.out.println("The factorial of "+n+" is "+fact);

}

}

**7)Write a program to find the Fibonacci series in java:**

import java.util.Scanner;

public class fibo

{

public static void main(String[]args)

{

int i;

int n,t1,t2,nxt;

t1=0;

t2=1;

Scanner sc=new Scanner(System.in);

System.out.println("Enter the count");

n=sc.nextInt();

sc.close();

for(i=1;i<=n;i++)

{

System.out.print(t1+" ");

nxt=t1+t2;

t1=t2;

t2=nxt;

}

}

}

**8)Write a program to find whether a year is leap year or not:**

import java.util.Scanner;

public class leap

{

public static void main(String[]args)

{

int yr;

Scanner sc=new Scanner(System.in);

System.out.println("Enter the year:");

yr=sc.nextInt();

sc.close();

if(yr%4==0)

{

System.out.println(yr+" is leap year");

}

else

{

System.out.println(yr+" is not leap year");

}

}

}

**9)Write a program to find whether a number is palindrome or not in java:**

import java.util.Scanner;

public class palinum

{

public static void main(String[]args)

{

int num1,num2,d,rev=0;

Scanner sc=new Scanner(System.in);

System.out.println("Enter the number");

num1=sc.nextInt();

sc.close();

num2=num1;

while(num2!=0)

{

d=num2%10;

rev=(rev\*10)+d;

num2=num2/10;

}

if(rev==num1)

{

System.out.println(num1+" is a palindrime");

}

else

{

System.out.println(num1+" is not a palindrome");

}

}

}

**10)Write a program to print pattern in java:**

import java.io.\*;

public class pattern

{

public static void main(String[]args)

{

int i,j;

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

{

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

{

System.out.print("\*"+" ");

}

System.out.println("");

}

}

}

**11)Write a program to find whether a number is prime or not in java:**

import java.util.Scanner;

class prime

{ int i;

int count;

int isPrime(int num)

{

for(i=1;i<=num;i++)

{

if(num%i==0)

{

count++;

}

}

return count;

}

}

public class primeornot

{

public static void main(String[]args)

{

int flag=0;

int n;

Scanner sc=new Scanner(System.in);

System.out.println("Enter the number:");

n=sc.nextInt();

sc.close();

prime obj=new prime();

flag=obj.isPrime(n);

if(flag==2)

{

System.out.println(n+" is Prime");

}

else

{

System.out.println(n+" is not Prime");

}

}

}

**12)Write a program to reverse the given numbers in java:**

import java.util.Scanner;

public class reverse

{

public static void main(String[]args)

{

int num1,num2,d,rev=0;

Scanner sc=new Scanner (System.in);

System.out.println("Enter the number:");

num1=sc.nextInt();

sc.close();

num2=num1;

while(num2!=0)

{

d=num2%10;

rev=(rev\*10)+d;

num2=num2/10;

}

System.out.println("The reverse of "+num1+" is: "+rev);

}

}

**13)Write a program to find the given string is palindrome or not in java:**

import java.util.Scanner;

public class stringpalin

{

public static void main(String args[])

{

String str,rev="";

Scanner sc=new Scanner(System.in);

System.out.println("Enter the String:");

str=sc.nextLine();

int length=str.length();

for(int i=length-1;i>=0;i--)

{

rev=rev+str.charAt(i);

}

if(str.equals(rev))

System.out.println(str+" is palindrome");

else

System.out.println(str+" is not palindrome");

}

}

**14)Write a program to swap two strings in java:**

import java.util.Scanner;

public class swap

{

public static void main(String[]args)

{

String str1,str2,temp;

System.out.println("Enter the string1:");

Scanner sc=new Scanner(System.in);

str1=sc.nextLine();

System.out.println("Enter the String2:");

str2=sc.nextLine();

sc.close();

System.out.println("Before Swap");

System.out.println("The String1 is: "+str1);

System.out.println("The String2 is: "+str2);

temp=str1;

str1=str2;

str2=temp;

System.out.println("After Swap");

System.out.println("The String1 is: "+str1);

System.out.println("The String2 is: "+str2);

}

}

**15)Write a program to find whether the alphabet is vowel or not in java:**

import java.util.Scanner;

public class vowel

{

public static void main(String[]args)

{

String str;

System.out.println("Enter the string:");

Scanner sc=new Scanner(System.in);

str=sc.next();

sc.close();

switch(str)

{

case"a":

case"e":

case"i":

case"o":

case"u":

System.out.println("The alphabet is a vowel");

break;

default:

System.out.println("The alphabet is a consonant");

}

}

}

**Simple C programs**

**Write a program to find whether the number is Armstrong number or not in C:**