Application Programming Practical File

Submitted By:
Name: Ansh Tyagi
Branch: IT
Roll Number: 11912079

INDEX

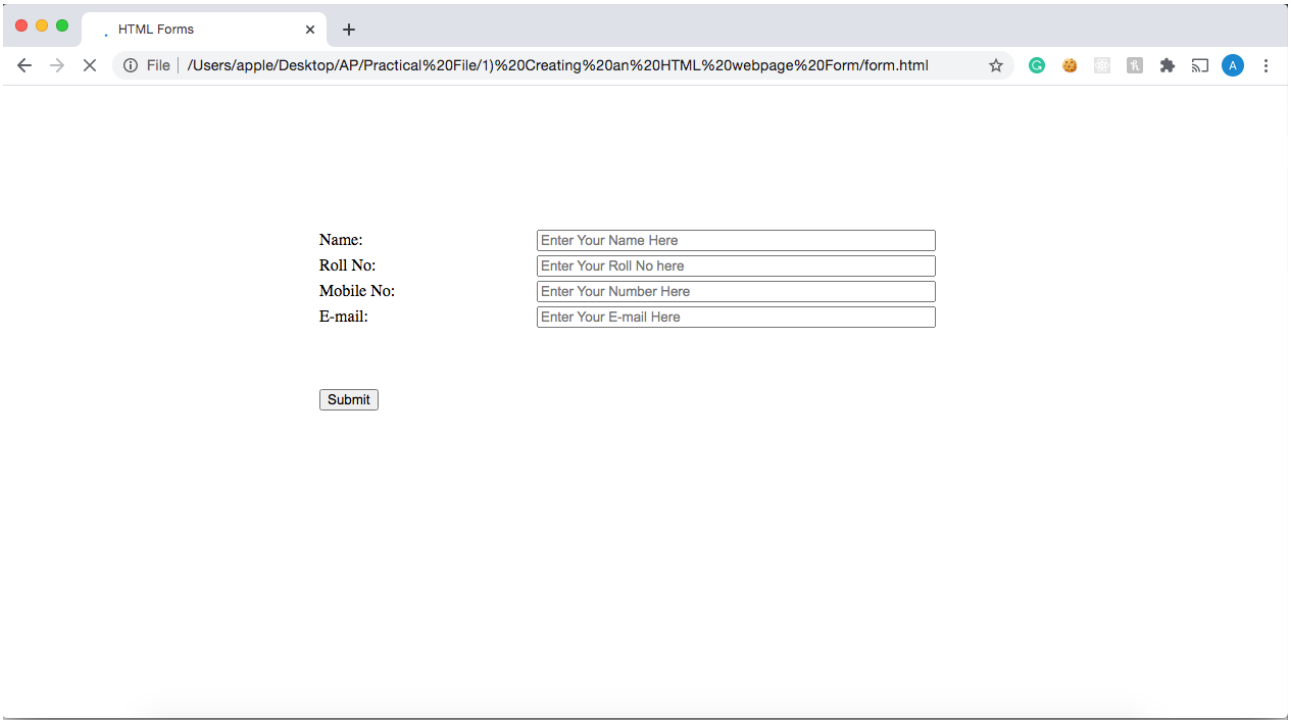
S.No.	Program	Page No.
1	Creating a HTML Page Form	2
2	Creating HomePage using HTML	4
3	Creating XHTML and CSS and understanding its use in creating web pages	6
4	Setting up and configuration of Apache Tomcat server	8
5	Creating Websites using PHP	10
6	Understanding JS	11
7	Creating a Web Page BackEnd in PHP and FrontEnd in JS	13
8	Writing and understanding program in Python	16
9	Use Python Libraries like Math statistics to create programs for scientific calculations	17

Program 1. Creating a HTML Page Form

Code:

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
<head>
<meta charset="utf-8">
<title>HTML Forms</title>
<style >
  body{ background-color : white; }
  .success{ margin :0px 300px 200px 300px ;
    }
    .container{ margin : auto;
    background-color: white;}
  input[type=text],input[type=email]{ width : 90%;
         }
.body{ padding : 20px;
    text-align :center;
  }
</style>
</head>
<body>
<div class="body">
    <img src="http://iiitsonepat.ac.in/iiits-content/uploads/2019/06/logonew.png" alt="logo" width="60%">
</div>
<div class="success">
  <form class="" method="post">
  <div class="container">
    <table width="100%">
      <tr>
        <td>Name:</td>
        <td><input type="text" placeholder="Enter Your Name Here" required></td><br>
      </tr>
      <tr>
        <td>Roll No:</td>
        <td>  <input type="text" placeholder="Enter Your Roll No here" required></td><br>
      </tr>
      <tr>
        <td>Mobile No:</td>
        <td><input type="text" placeholder="Enter Your Number Here" required></td><br>
      </tr>
        <tr>
      <td>E-mail:</td>
      <td><input type="email" placeholder="Enter Your E-mail Here" required></td><br>
       </tr>
    </table>
    <br><br><br>
    <table width="100%">
<tr>
  <center>
    <td><input type="submit" value="Submit"></td>
  </center>
</tr>
    </table>
</div>
</form>
</div>
</body>
</html>
```

Output:


HTML Forms
File | /Users/apple/Desktop/AP/Practical%20File/1)%20Creating%20an%20HTML%20webpage%20Form/form.html
Name:
Enter Your Name Here
Roll No:
Enter Your Roll No here
Mobile No:
Enter Your Number Here
E-mail:
Enter Your E-mail Here
Submit

Program 2: Creating HomePage using HTML

Code:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN" "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
	<title></title>
</head>
<frameset rows="10%, 80%, 10%">
	<frame name="top" src="/Users/apple/Desktop/AP/top.html" />
	<frame name="middle" src="/Users/apple/Desktop/AP/frame1.html" />
	<frame name="bottom" src="/Users/apple/Desktop/AP/bottom.html" />
</frameset>
</html>
```

top.html:

```
<!DOCTYPE html>
<html>
<head>
	<title></title>
</head>
<body bgcolor="#c85528">
	<center><p style="font-size:30px; margin-top: 15px"  >IIIT Sonepat</p></center>
</body>
</html>
```

frame1.html

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN" "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
	<title></title>
</head>

<frameset cols="20%, 60%, 20%">
	<frame name="details" src="/Users/apple/Desktop/AP/details.html"></frame>
	<frame name="image" src="/Users/apple/Desktop/AP/img.html"></frame>
	<frame name="assignment" src="/Users/apple/Desktop/AP/assignment.html"></frame>
</frameset>
</html>
```

bottom.html:

```
<!DOCTYPE html>
<html>
<head>
	<title></title>
</head>
<body bgcolor="c85528">
	<p align="right">Contact Detail: iiitsonepat@gmail.com</p>
</body>
</html>
```

Output:

File | /Users/apple/Desktop/AP/Practical%20File/2)%20Creating%20Home%20Page%20using%20HTML/main.html
IIIT Sonepat
Name: Ansh Tyagi
Roll No.: 11912079
Branch: IT
2014
INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, SONEPAT
तेजस्वि नावधीतमस्तु
This is the assignment for Application Programming
Contact Detail: iiitsonepat@gmail.com

Program 3: Creating XHTML and CSS and understanding its use in creating web pages

Code:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html lang="en" dir="ltr">
  <head>
    <title>Registration Form</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>

<center><img src="logo.png" width="50%" height="100px"></center>
    <div class="acc">
      <h1>Create Your Account</h1>
    </div>
    <div>
        <div class="dv">
<form method="post">
  <table width="100%">
    <th><label>First Name</label>
    <input type="text" placeholder="Enter your Firstname here"></th>
    <th><label for="">Last Name</label>
    <input type="text" placeholder="Enter your Lastname here"></th>
  </table>
  <br>
  <div>
    <label class="abc"><b>E-mail:</b></label>
<br>
<input type="email" placeholder="Enter your email here">
<br>
<label class="abc">Gender:</label>
<input type="radio" name="ab" value="male">Male
<input type="radio" name="ab" value="female">Female
<input type="radio" name="ab" value="others">Others
<br>
  </div>
  <hr>
  <table width="100%">
    <th><input type="submit"  value="Register"></th>
    <th><input type="reset"  value="Clear"></th>
  </table>
</form>
</div>
</div>
</body>
</html>
```

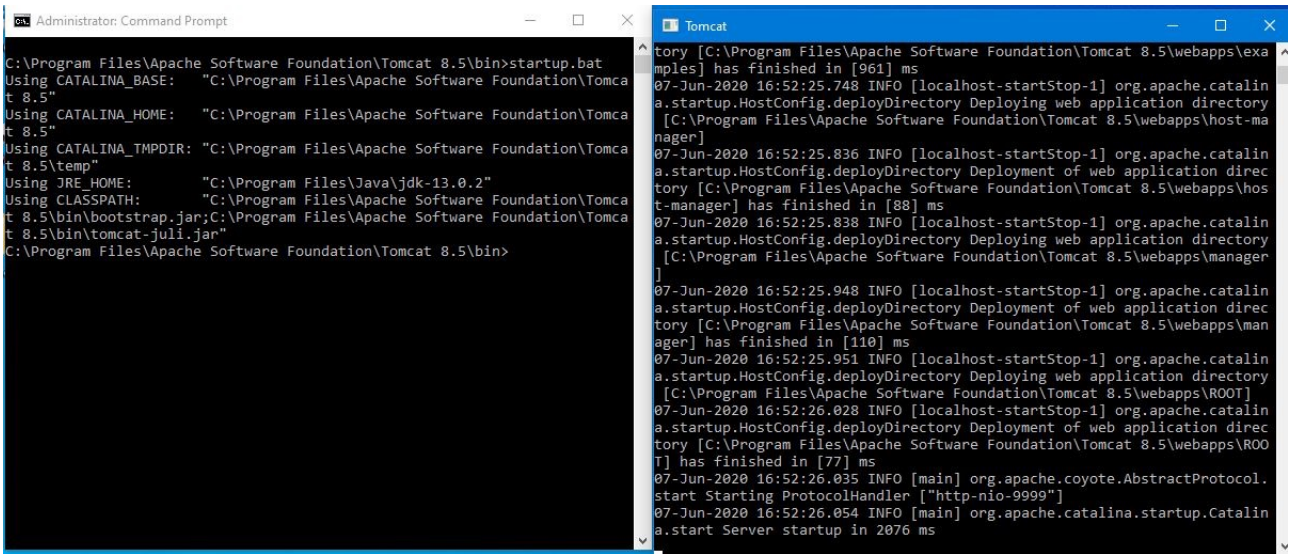
stylesheet.css:

```
.dv{ background-color:#4a4646;
    margin: 0px 300px 300px 300px;}
    .abc{margin-left: 60px;}

input[type=email]{width:50%;
      margin-left: 60px;
    }

body{background-color:#212020}
.acc{
            color: white;
            text-align: center;
    text-shadow: 5px;
  padding: 2px;
margin: auto;}
```

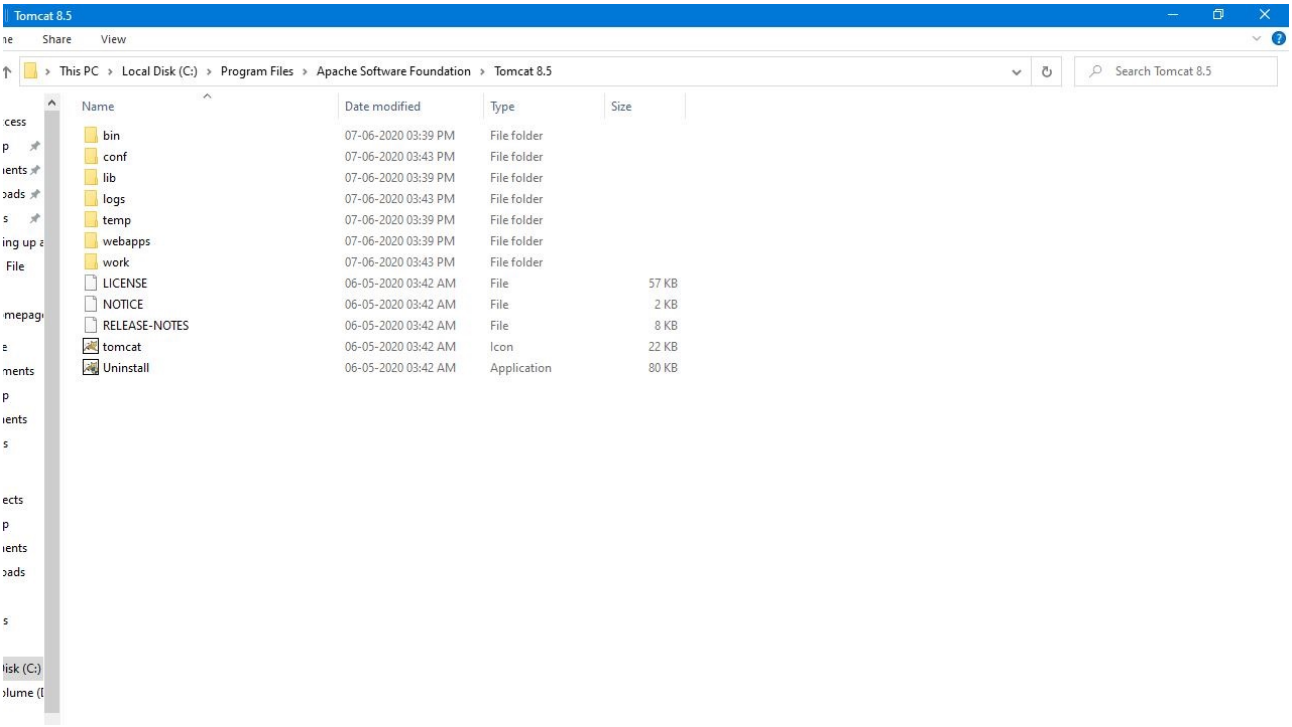
Output:

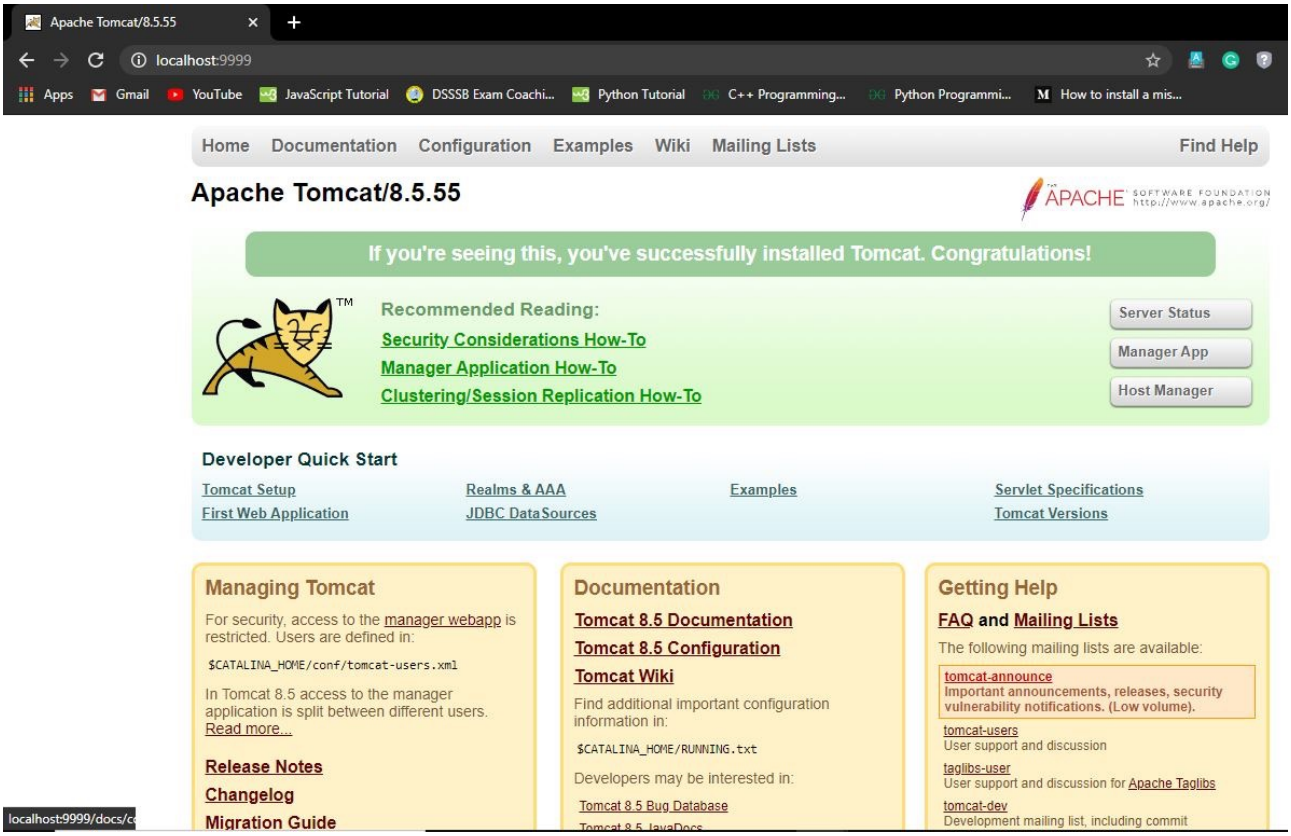
Program 4: Setting up and configuration of Apache Tomcat server

STEPS:




```
<!-- The contents of this file will be loaded for each web application -->
<Context reloadable="true">

    <!-- Default set of monitored resources. If one of these changes, the    -->
    <!-- web application will be reloaded.                                   -->
    <WatchedResource>WEB-INF/web.xml</WatchedResource>
```



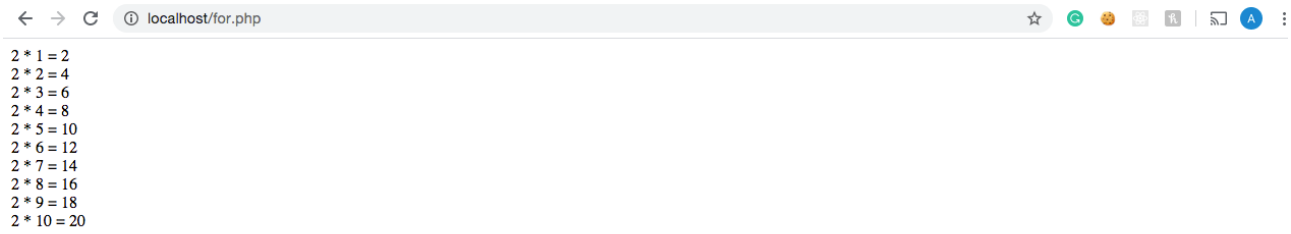

Apache Tomcat/8.5.55
localhost:9999
Apps
Gmail
YouTube
JavaScript Tutorial
DSSSB Exam Coachi...
Python Tutorial
C++ Programming...
Python Programmi...
How to install a mis...
Home
Documentation
Configuration
Examples
Wiki
Mailing Lists
Find Help
Apache Tomcat/8.5.55
APACHE SOFTWARE FOUNDATION http://www.apache.org/
If you're seeing this, you've successfully installed Tomcat. Congratulations!
Recommended Reading:
Security Considerations How-To
Manager Application How-To
Clustering/Session Replication How-To
Server Status
Manager App
Host Manager
Developer Quick Start
Tomcat Setup
First Web Application
Realms & AAA
JDBC DataSources
Examples
Servlet Specifications
Tomcat Versions
Managing Tomcat
For security, access to the manager webapp is restricted. Users are defined in:
$CATALINA_HOME/conf/tomcat-users.xml
In Tomcat 8.5 access to the manager application is split between different users.
Read more...
Release Notes
Changelog
Migration Guide
Documentation
Tomcat 8.5 Documentation
Tomcat 8.5 Configuration
Tomcat Wiki
Find additional important configuration information in:
$CATALINA_HOME/RUNNING.txt
Developers may be interested in:
Tomcat 8.5 Bug Database
Getting Help
FAQ and Mailing Lists
The following mailing lists are available:
tomcat-announce
Important announcements, releases, security vulnerability notifications. (Low volume).
tomcat-users
User support and discussion
taglibs-user
User support and discussion for Apache Taglibs
tomcat-dev
Development mailing list, including commit
localhost:9999/docs/c

Program 5: Creating Websites using PHP

Code:

```
<html>
  <body>
    <?php
      $a = 2;

      for( $i = 1; $i<=10; $i++ ) {
        $temp = $a * $i;
        echo("$a * $i = $temp");
        echo("<br>");
      }
    ?>
  </body>
</html>
```

Output:

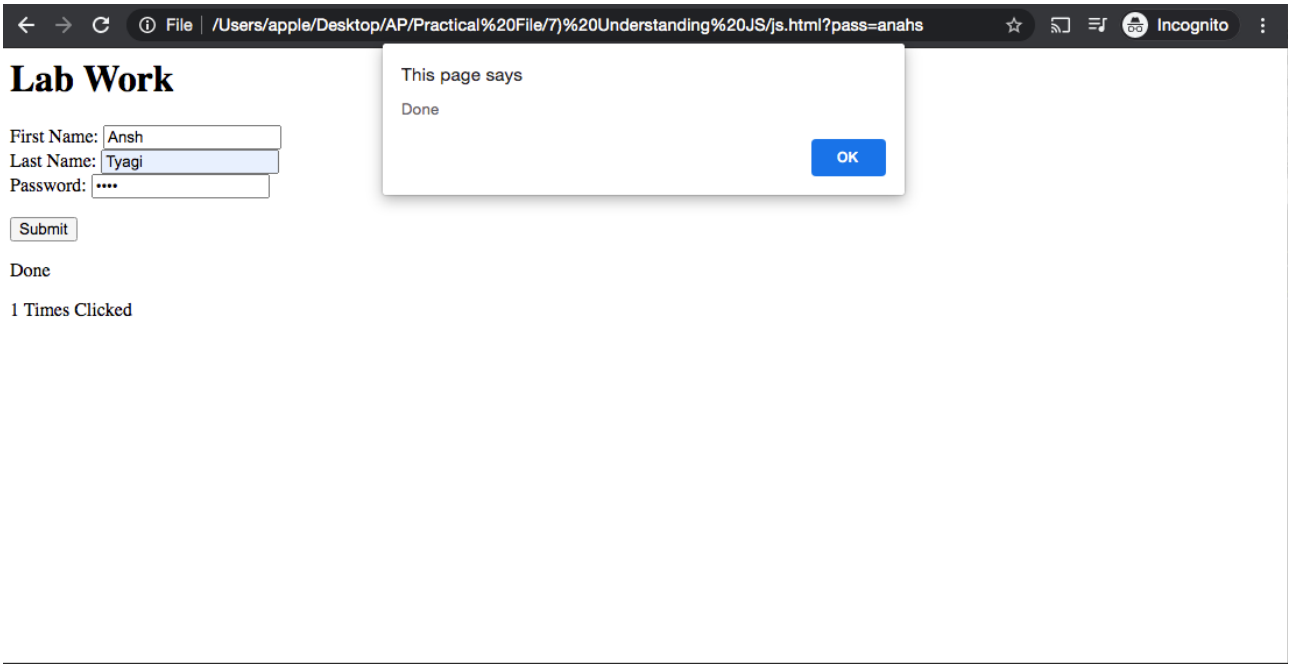


Program 6: Understanding JS

Code:

```
<html>
  <head>
    <title>Lab Work</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
  </head>
  <div class="jumbotron text-center">
    <h1>Lab Work</h1>
  </div>
  <div class='container'>
    <form class="form-horizontal" name=form onsubmit="validateForm()">
      <div class="form-group">
        <label>First Name:</label>
        <input type='text' class='form-control' id='fname'>
      </div>
      <div class = 'form-group'>
        <label>Last Name:</label>
        <input type="text" class='form-control' id='lname'>
      </div>
      <div class="form-group">
        <label>Password:</label>
        <input type='password'class='form-control' id='pwd' name ="pass" required>
        <p class="checkpass"></p>
      </div>
      <button type="submit" class="btn btn-default" id="submit">Submit</button>
      <p id="state">NOT SUBMITTED</p>
      <p id="num"></p>
    </form>
  </div>
  <script>
    var submit = document.querySelector("#submit")
    var num_pressed = 0;
    var dis = document.querySelector("#num")
    dis.textContent = "0 times clicked"
    submit.addEventListener("click", function(){
      num_pressed++;
      dis.textContent = num_pressed + " Times Clicked";
      document.getElementById("state").innerHTML = "Done";
      alert("Done");
    })

    function validateForm(){
      var x = document.forms['form']['pass'].value;
      if(x==""){
        alert("error");
        return false;
      }
    }
  </script>
</html
```

Output:


File | /Users/apple/Desktop/AP/Practical%20File/7)%20Understanding%20JS/js.html?pass=anahs
Incognito
Lab Work
First Name: Ansh
Last Name: Tyagi
Password: ••••
Submit
Done
1 Times Clicked
This page says
Done
OK

Program 7: Creating a Web Page BackEnd in PHP and FrontEnd in JS

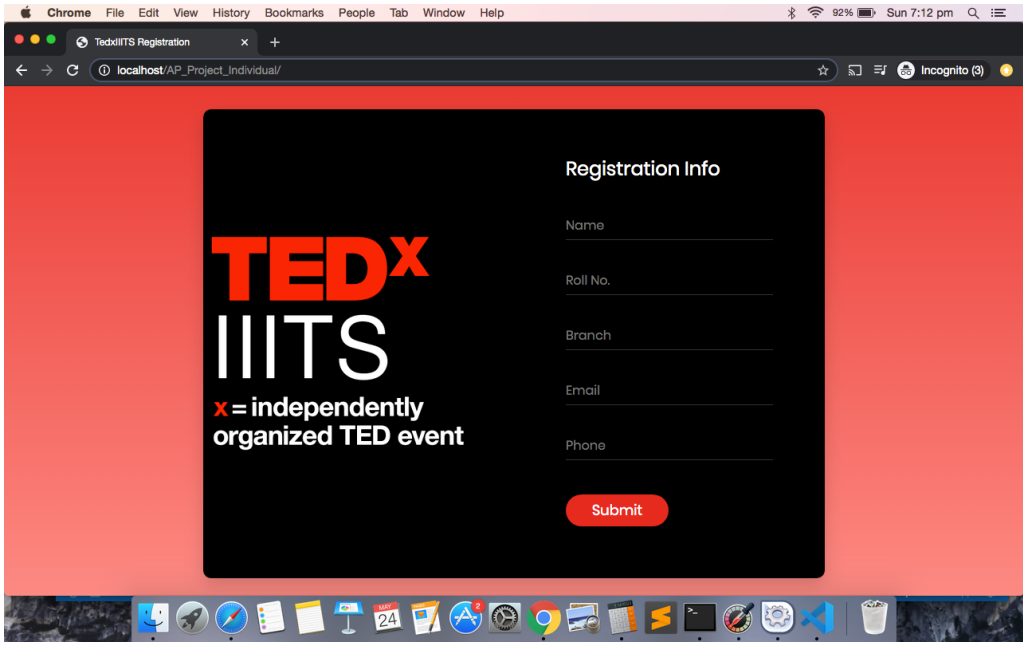
Code:

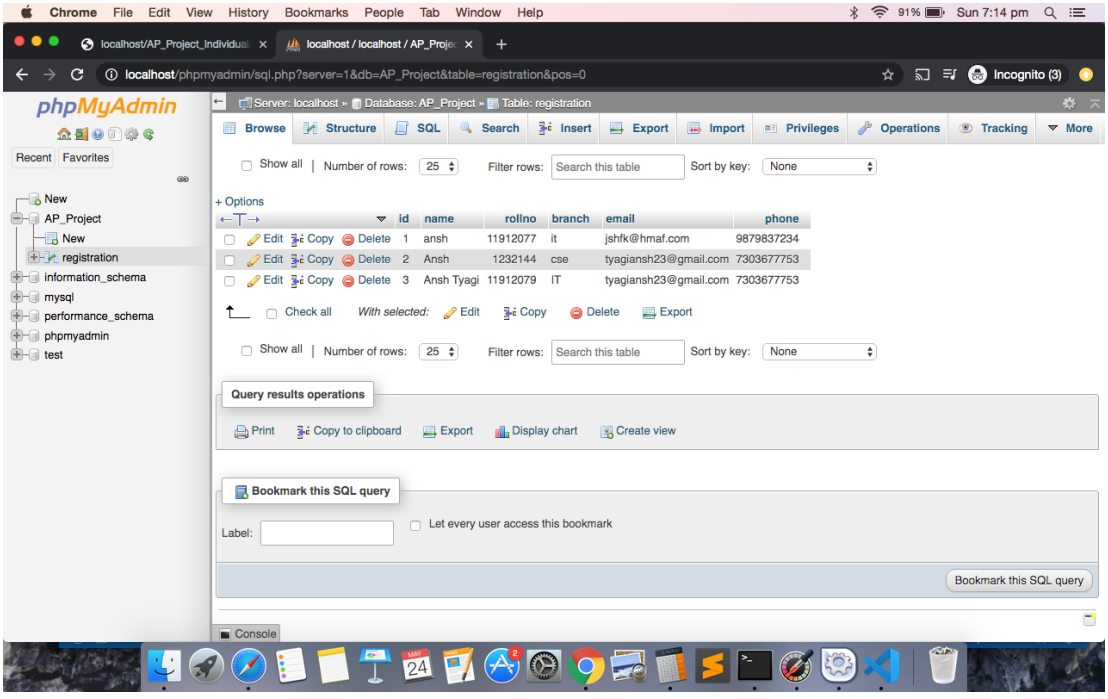
```
<!DOCTYPE html>
<html lang="en">
<head>
    <!-- Required meta tags-->
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
    <!-- Title Page-->
    <title>TedxIIITS Registration</title>
    <!-- Icons font CSS-->
    <link href="vendor/mdi-font/css/material-design-iconic-font.min.css" rel="stylesheet" media="all">
    <link href="vendor/font-awesome-4.7/css/font-awesome.min.css" rel="stylesheet" media="all">
    <!-- Font special for pages-->
      <link href="https://fonts.googleapis.com/css?family=Poppins:100,100i,200,200i,300,300i,400,400i,500,500i,600,600i,
700,700i,800,800i,900,900i" rel="stylesheet">
    <link href="vendor/select2/select2.min.css" rel="stylesheet" media="all">
    <link href="vendor/datepicker/daterangepicker.css" rel="stylesheet" media="all">
    <link href="style.css" rel="stylesheet" media="all">
</head>
<body>
    <div class="page-wrapper bg-gra-01 p-t-180 p-b-100 font-poppins">
        <div class="wrapper wrapper-w780">
            <div class="card card-1">
                <div class="card-heading"></div>
                <div class="card-body">
                    <h2 class="title">Registration Info</h2>
                    <form method="POST" action="server.php">
                        <div class="input-group">
                            <input class="input-style" type="text" placeholder="Name" name="name">
                        </div>
                        <div class="input-group">
                            <input class="input-style" type="text" placeholder="Roll No." name="rollno">
                        </div>
                        <div class="input-group">
                            <input class="input-style" type="text" placeholder="Branch" name="branch">
                        </div>
                        <div class="input-group">
                            <input class="input-style" type="email" placeholder="Email" name="email">
                        </div>
                        <div class="input-group">
                            <input class="input-style" type="text" placeholder="Phone" name="phone">
                        </div>
                        <div class="p-t-10">
                            <button class="btn btn-pill btn-red" type="submit">Submit</button>
                        </div>
                    </form>
                </div>
            </div>
        </div>
    </div>
</body>
</html>
```

server.php

```
<html>
<head><link rel="stylesheet" href="style.css"></head>
<body>
<div class="page-wrapper bg-gra-01 p-t-180 p-b-100 font-poppins">
<?php
    $name = $_POST["name"];
    $rollno = $_POST["rollno"];
    $branch = $_POST["branch"];
    $email = $_POST["email"];
    $phone = $_POST["phone"];

    $connection = new mysqli('localhost','root','','AP_Project');
    if($connection->connect_error){
        die('Connection Failed');
    }
    else{
                        $stmt = $connection->prepare("Insert into
registration(name,rollno,branch,email,phone) values(?,?,?,?,?)");
        $stmt->bind_param("sissi",$name,$rollno,$branch,$email,$phone);
        $stmt->execute();
        $stmt->close();
        $connection->close();
    }
?>
<center><button class="btn btn-pill btn-red">DONE!</button></center>
</div>
</body>
</html>
```

Output:


TEDx
IIITS
x = independently organized TED event
Registration Info
Name
Roll No.
Branch
Email
Phone
Submit

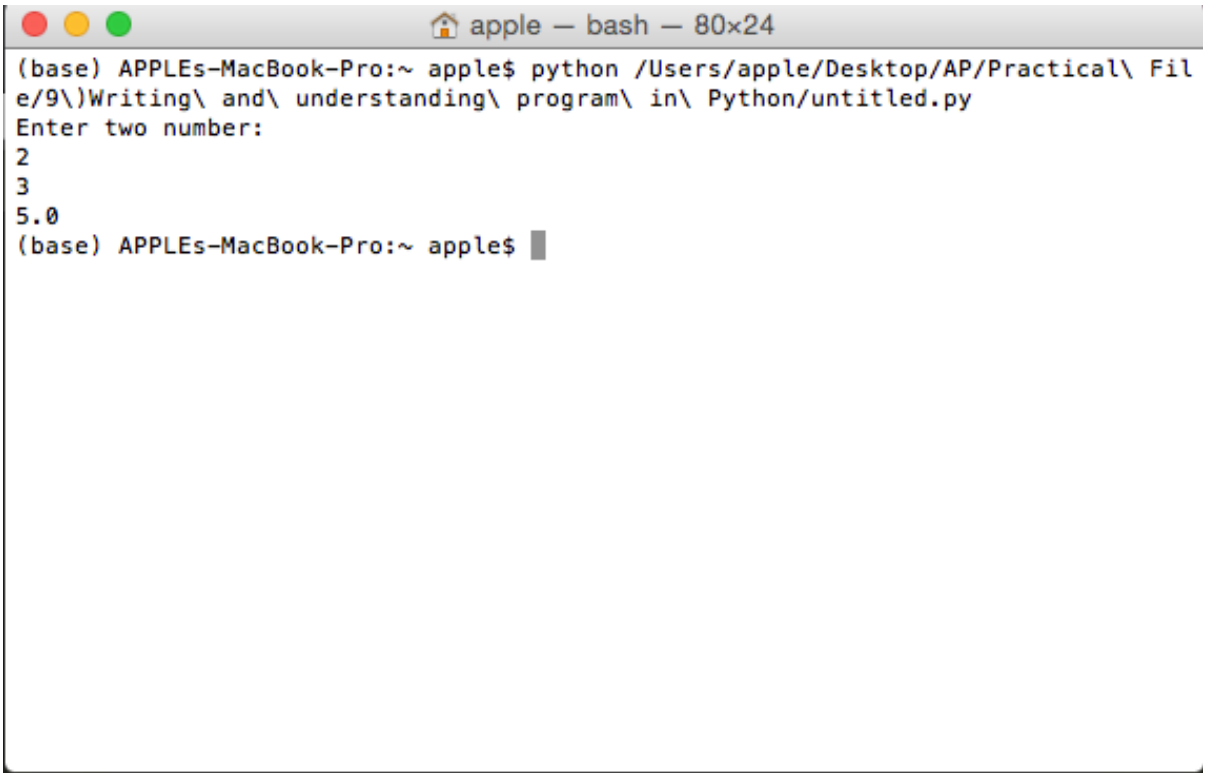

phpMyAdmin
Server: localhost » Database: AP_Project » Table: registration
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
More
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Console

Program 8: Writing and understanding program in Python

Code:

```
def add(x,y):
        total = float(a)+float(b);
        return total

print("Enter two number:")
a = input()
b= input()
print(add(a,b));
```

Output:

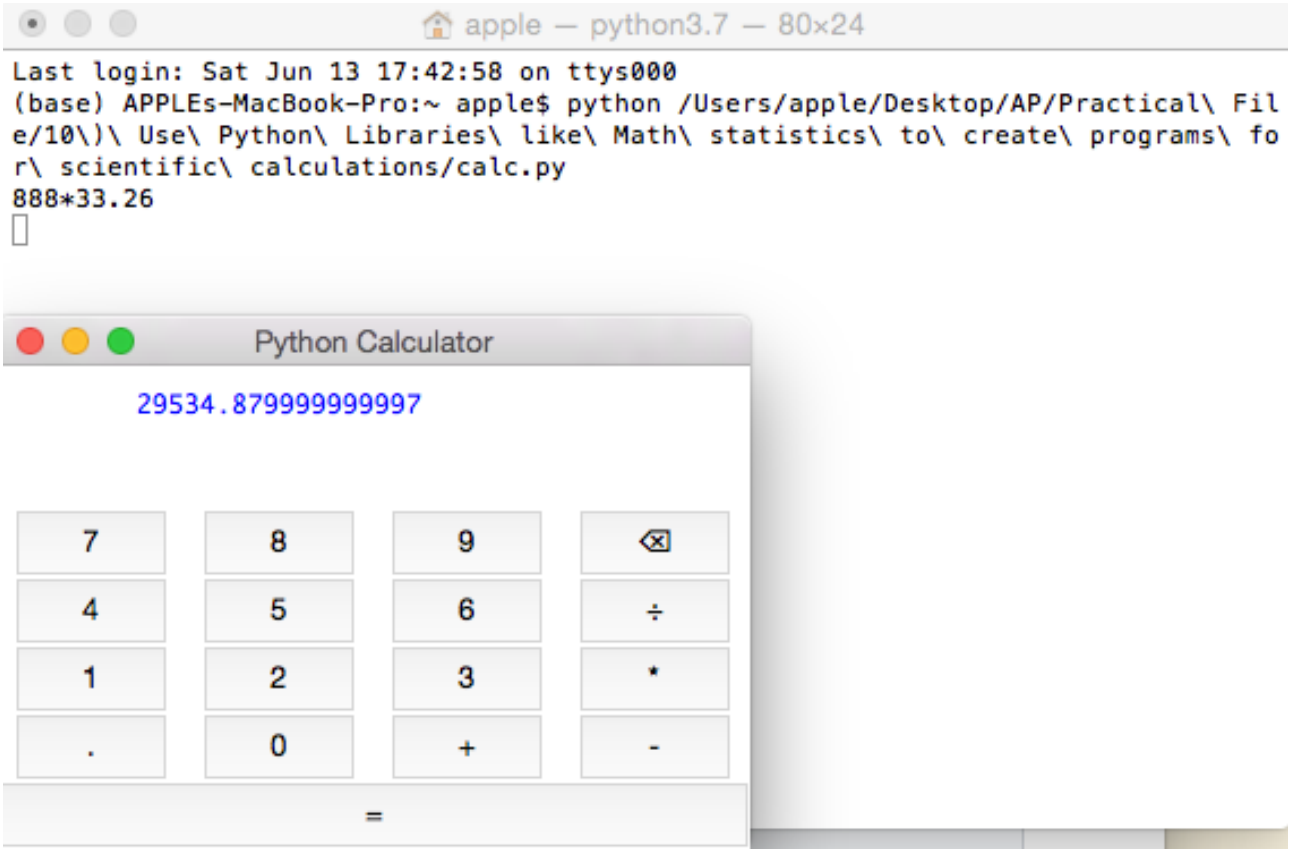


Program 9: Use Python Libraries like Math statistics to create programs for scientific calculations

Code:

```
from tkinter import *
class Calc:
    def __init__(self,master):
        self.master = master
        master.title("Python Calculator")
        self.screen = Text(master,state='disabled',width=30,height=3,background="white",foreground="blue")
        self.screen.grid(row=0,column=0,columnspan=4,padx=5,pady=5)
        self.screen.configure(state='normal')
        self.equation = ''
        b1=self.createButton(7)
        b2=self.createButton(8)
        b3=self.createButton(9)
        b4=self.createButton(u"\u232B",None)
        b5=self.createButton(4)
        b6=self.createButton(5)
        b7=self.createButton(6)
        b8=self.createButton(u"\u00F7")
        b9=self.createButton(1)
        b10=self.createButton(2)
        b11=self.createButton(3)
        b12=self.createButton('*')
        b13=self.createButton('.')
        b14=self.createButton(0)
        b15=self.createButton('+')
        b16=self.createButton('-')
        b17=self.createButton('=',None,40)
        buttons = [b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11,b12,b13,b14,b15,b16,b17]
        count=0
        for row in range(1,5):
            for col in range(4):
                buttons[count].grid(row=row,column=col)
                count+=1
        buttons[16].grid(row=5,column =0,columnspan=4)
    def createButton(self,val,write=True,width=7):
        return Button(self.master,text=val,command=lambda : self.click(val,write),width=width,padx=5,pady=5)
    def click(self,text,write):
        if write ==None:
            if text == '=' and self.equation:
                self.equation=re.sub(u"\u00F7",'/',self.equation)
                print(self.equation)
                ans = str(eval(self.equation))
                self.clear_screen()
                self.insert_screen(ans,newline=True)
            elif text == u"\u232B":
                self.clear_screen()
        else:
            self.insert_screen(text)
    def clear_screen(self):
        self.equation=''
        self.screen.configure(state='normal')
        self.screen.delete('1.0',END)
    def insert_screen(self,value,newline=False):
        self.screen.configure(state="normal")
        self.screen.insert(END,value)
        self.equation += str(value)
        self.screen.configure(state='disabled')
root = Tk()
my_gui = Calc(root)
root.mainloop()
```

Output:


apple — python3.7 — 80×24
Last login: Sat Jun 13 17:42:58 on ttys000
(base) APPLEs-MacBook-Pro:~ apple$ python /Users/apple/Desktop/AP/Practical\ File/10\)\ Use\ Python\ Libraries\ like\ Math\ statistics\ to\ create\ programs\ for\ scientific\ calculations/calc.py
888*33.26
Python Calculator
29534.879999999997
7
8
9
⌫
4
5
6
÷
1
2
3
*
.
0
+
-
=