# LAB FILE APPLICATION PROGRAMMING



Submitted To: Prof. Md Arquam Submitted By:

Vikrant Judge
Roll No:11911016

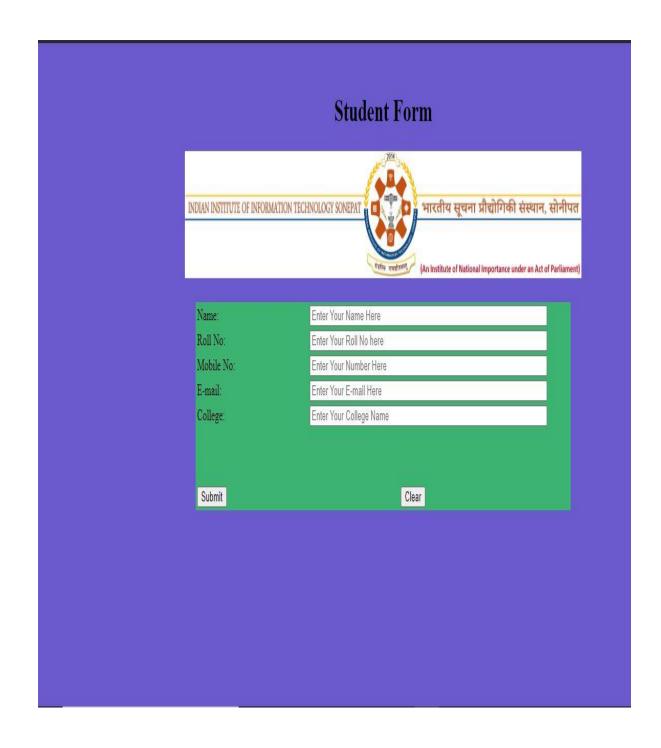
CSE

### 1). Creating an HTML web page form

#### Source Code:

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
<head>
<meta charset="utf-8">
<title>HTML Forms</title>
<style >
body{ background-color : #6a5acd; }
.abc{ margin :0px 300px 200px 300px ;
.ab{ margin : auto;
background-color: mediumseagreen;}
input[type=text],input[type=email]{ width : 90%;
.bc{ padding : 20px;
text-align :center;
}
</style>
</head>
<body>
<div class="bc">
<h1>Student Form</h1>
<img src="http://iiitsonepat.ac.in/iiits-content/uploads/2019/06/logonew.png" alt="Logo"</pre>
width="60%">
</div>
<div class="abc">
<form class="" action="Success.html" method="post">
<div class="ab">
Name:
<input type="text" placeholder="Enter Your Name Here" required>
Roll No:
<input type="text" placeholder="Enter Your Roll No here" required>
```

```
Mobile No:
<input type="text" placeholder="Enter Your Number Here" required>
E-mail:
<input type="email" placeholder="Enter Your E-mail Here" required>
College:
<input type="text" placeholder="Enter Your College Name">
<br><br><br>>
<input type="submit" value="Submit">
<input type="reset" value="Clear">
</div>
</form>
</div>
</body>
</html>
```



2). Creating Home Page using HTML.

#### Source Code:

#### 1.html

```
<html>
<head>
</head>
</head>
<body>
<center><img src="image.png" height="95%" width="90%"></center>
</body>
</html>
```

#### 2.html

```
<html>
<head>
</head>
</head>
<frameset cols="15%,70%,15%">
<frame src="4.html">
<frame src="5.html">
<frame src="6.html">
</html>
```

#### 3.html

```
<html>
<head>
</head>
</head>
<body>
<marquee><h1>Address- IIT DELHI TECHNO PARK,SONEPAT Contact No. 123456789</h1></marquee>
</body>
</html>
```

#### 4.html

```
<html>
<head>
<style>
h1 {
text-shadow: 2px 2px 5px purple;
}
h3
text-shadow: 2px 2px 5px pink;
</style>
</head>
<body>
<h3>Latest News</h3>
>Notice for the Extension
for Suspension of classes
>Notice for the Extension
for Suspension of classes
>Re-scheduling of Summer
Vacation.
>Notice for the Extension
for Suspension of classes
>Hostel Fees Notice for Academic year 2019-2020
</body>
</html>
```

#### 5.html

```
<html>
<head>
<style>
button
{
font-size:20px;
}
body {
background-image: url("img.jpg");
```

```
background-color: #ccccc;
background-size: cover;
</style>
</head>
<body>
<center><div>
<button type="Home">Home</button>
<button type="About">About</button>
<button type="Admission">Admission</button>
<button type="Acadmics">Acadmics</button>
<button type="Acadmics">Examination</button>
<button type="Acadmics">Placements</button>
<button type="Acadmics">Students</button>
<button type="Acadmics">Activities</button>
</div></center>
</body>
</html>
```

#### 6.html

```
<html>
<head>
<style>
h1 {
text-shadow: 2px 2px 5px purple;
</style>
</head>
<body>
<h3>about us</h3>
Indian Institute of Information Technology, Sonepat (IIIT, Sonepat) is one of the
Indian Institutes of Information Technology located at Sonepat, Haryana. The academic
session of IIIT Sonepat started from its mentor Institute National Institute of Technology,
Kurukshetra from year 2014. IIIT Sonepat is a joint venture of the Ministry of Human
Resource Development, Government of India, the Govt. of Haryana, with Industries in
Public-Private Partnership model and has been declared as the Institute of national
importance.
</body>
</html>
```

# Homepage.html

```
<html>
<head>
</head>
<frameset rows = "22%,70%">
<frame src = "1.html">
<frame src = "2.html">
</frameset>
</html>
```

#### INDIAN INSTITUTE OF INFORMATION TECHNOLOGY SONEPAT



#### भारतीय सूचना प्रौद्योगिकी संस्थान, सोनीपत

(An Institute of National Importance under an Act of Parliament)

#### Latest News

>Notice for the Extension for Suspension of classes >Notice for the Extension for Suspension of classes >Re-scheduling of Summer Vacation.

>Notice for the Extension for Suspension of classes >Hostel Fees Notice for Aca



#### about us

Indian Institute of Information Technology, Sonepat (IIIT, Sonepat) is one of the Indian Institutes of Information Technology located at Sonepat, Haryana. The academic session of IIIT Sonepat started from its mentor Institute National Institute of Technology, Kurukshetra from year 2014. IIIT Sonepat is a joint venture of the Ministry of Human Resource Development, Government of India, the Govt. of Haryana, with Industries in Public-Private Partnership model and has been declared as the Institute of national importance.

# 3). Creating XHTML and CSS and understanding its use in creating web pages.

#### Source 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>
k rel="stylesheet" href="AP.css">
</head>
<body>
<div class="ab">
<h1>Create Your Account</h1></div>
<img src="Capture.jpg" width="100%" height="100px">
<div>
<div class="dv">
<form method="post">
<label>First Name</label>
<input type="text" placeholder="Enter your Firstname here">
<label for="">Last Name</label>
<input type="text" placeholder="Enter your Lastname here">
<br>
<br>
<div>
<label class="abc"><b>E-mail:</b></label>
<br>
<input type="email" placeholder="Enter your email here">
<br>>
<br>
<br>
<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>
<br
<br>
<br>
<label class="abc">Mobile No:</label><br>
<select >
<option>Select</option>
<option>+91</option>
<option>+310</option>
<option>+55</option>
<option>+1</option>
<option>+355</option>
</select>
<input type="text" placeholder="Enter your Mobile number ">
</div>
<hr>
<input type="submit" value="Register">
<input type="reset" value="Clear">
</form>
</div>
</div>
</body>
</html>
AP.css
.dv{ background-color:Lightgrey;
 margin: 0px 300px 300px 300px;}
```

.abc{margin-left: 60px;}

```
input[type=email]{width:50%;
    margin-left: 60px;
}
body{background-color:#fccfcc}
.ab{text-align: center;
    text-shadow: 5px;
    padding: 2px;
margin: auto;}
```

### Output:

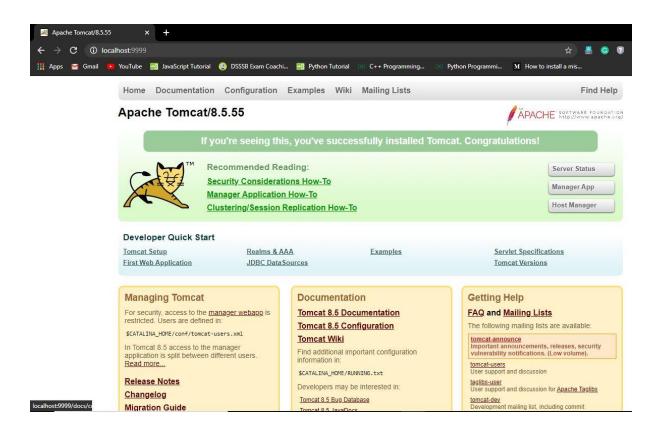
### **Create Your Account**

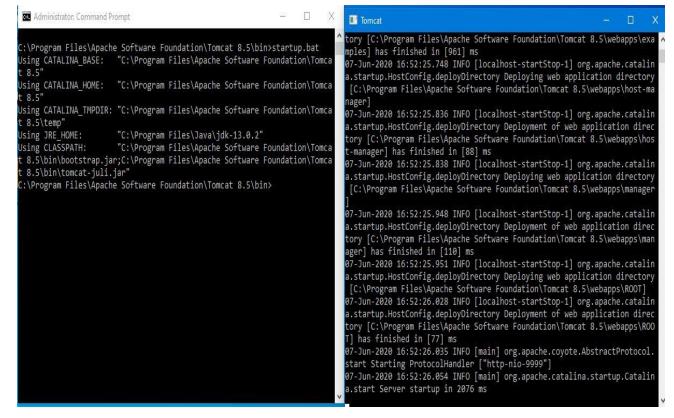
# PROGRAMMING <



E-mail:	
Enter your email here	
	100
Gender: OMale OFemale O	Others
Gender: OMale OFemale O	Others
Gender: OMale OFemale O	Others

#### 4). Setting up and configuration of Apache Tomcat server.

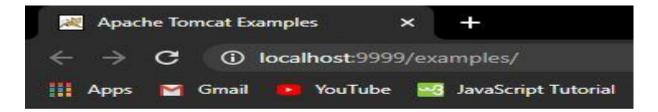




```
<!-- The contents of this file will be loaded for each web application -->
<Context reloadable="true">

<!-- Default set of monitored resources. If one of these changes, the
<!-- web application will be reloaded.

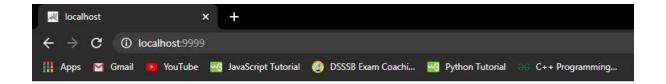
<WatchedResource>WEB-INF/web.xml</WatchedResource>
```



#### Apache Tomcat Examples

- Servlets examples
- JSP Examples
- WebSocket Examples

```
<!-- A "Connector" represents an endpoint by which requests are received
    and responses are returned. Documentation at :
    Java HTTP Connector: /docs/config/http.html
    Java AJP Connector: /docs/config/ajp.html
    APR (HTTP/AJP) Connector: /docs/apr.html
    Define a non-SSL/TLS HTTP/1.1 Connector on port 9999
-->
<Connector port="9999" protocol="HTTP/1.1"
          connectionTimeout="20000"
           redirectPort="8443" />
<!-- A "Connector" using the shared thread pool-->
<!--
<Connector executor="tomcatThreadPool"</pre>
          port="9999" protocol="HTTP/1.1"
          connectionTimeout="20000"
          redirectPort="8443" />
-->
```





#### This site can't be reached

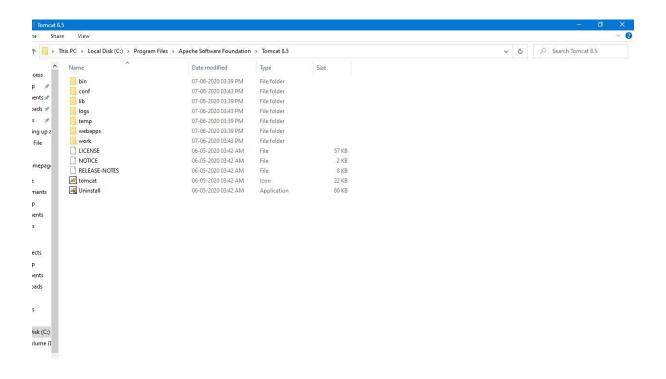
localhost refused to connect.

#### Try:

- · Checking the connection
- · Checking the proxy and the firewall

ERR\_CONNECTION\_REFUSED





#### 5). Understanding modification of Web.XML

The web.xml Deployment Descriptor file describes how to deploy a web application in a servlet container such as Tomcat.

This file is required for every application you deploy on Tomcat. You will find one in the jsp-examples, servlet-examples and ROOT applications provided on a new Tomcat website, and every web application example you download, including inside WAR files.

The location of the file is always the same: application root/WEB-INF/web.xml At minimum, the file needs to contain an XML descriptor and an opening and closing <web-app> tag. Open the configuration file "web.xml". We shall enable the directory listing by changing "listings" from "false" to "true" for the "default" servlet. < param - value > true < / param - value > like:

#### 6). Creating Websites using PHP.

#### **Source Codes:**

```
index.php
```

```
<?php echo file_get_contents("header.html");?>
<?php echo file_get_contents("navigation.html");?>
<?php echo file_get_contents("body.html");?>
<?php echo file_get_contents("footer.html");?>
```

#### about.php

```
<?php echo file_get_contents("header.html");?>
<?php echo file_get_contents("navigation.html");?>
<?php echo file_get_contents("ft.html");?>
```

#### contact.php

```
<?php echo file_get_contents("header.html");?>
<?php echo file_get_contents("navigation.html");?>
<?php echo file_get_contents("abt.html");?>
```

#### navigation.html

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
<head>
<style>
.topnav {
overflow: hidden;
background-color: #333;
width: 100%;
}
.topnav a {
float: left;
```

```
display: block;
color: #f2f2f2;
text-align: center;
padding: 14px 16px;
text-decoration: none;
.topnav a:hover {
background-color: #ddd;
color: black;
</style>
</head>
<body>
<div class="topnav">
<a href="index.php">Home</a>
<a href="about.php">About Us</a>
<a href="contact.php">Contact Us</a>
</div>
</body>
</html>
```

#### header.html

#### body.html

```
<!DOCTYPE html>
 <html lang="en" dir="ltr">
 <head>
 <style>
 .mySlides {display:none;}
 </style>
 </head>
 <body style="background-color:#DDDDDD;">
 <div style="max-height:800px">
   <img class="mySlides" src="1.jpg" style="width:100%">
   <img class="mySlides" src="2.jpg" style="width:100%">
   <img class="mySlides" src="3.jpg" style="width:100%">
    <img class="mySlides" src="4.jpg" style="width:100%">
     <img class="mySlides" src="5.jpg" style="width:100%">
       <img class="mySlides" src="6.jpg" style="width:100%">
  </div>
  <script>
  var myIndex = 0;
  carousel();
  function carousel() {
   var i;
   var x = document.getElementsByClassName("mySlides");
   for (i = 0; i < x.length; i++)
    x[i].style.display = "none";
   myIndex++;
   if (myIndex > x.length) \{myIndex = 1\}
   x[myIndex-1].style.display = "block";
   setTimeout(carousel, 2000); // Change image every 2 seconds
  </script>
 </body>
 </html>
ft.html
<!DOCTYPE html>
<html lang="en" dir="ltr">
<head>
 <style media="screen">
  body{
   background-image: url("8.jpg");
```

```
background-repeat: no-repeat;
background-size: cover;
display: block;
color: white;
text-align: left;
padding: 14px 16px;
text-decoration: none;
}
</style>
</head>
<body>
<div>
<b>
```

Programeeez is optimized for learning, testing, and training. Examples might be simplified to improve reading and basic understanding.

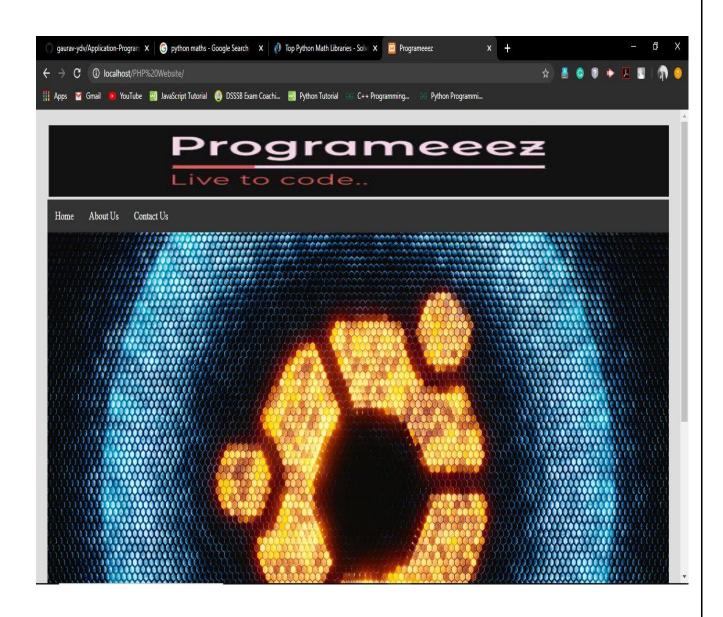
Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content.

While using this site, you agree to have read and accepted our terms of use, cookie and privacy policy.

Copyright 2020. All Rights Reserved.

```
</b>
</div>
 <div >
  <footer>
  <address>
Rohtak, Haryana
124001
</address>
  </footer>
Copyright © GT 2019
 </div>
</body>
</html>
abt.html
```

```
background-color: #ccccc;
 background-size: cover;
div{ color: white;
 </style>
</head>
<body>
 <a href="mailto:programeeez@abc.com?subject=feedback">Email Us</a>
 <br>>
<br>>
 <div>
  <footer>
  <address>
 Rohtak, Haryana
 124001
 </address>
  </footer>
 Copyright © GT 2019
 </div>
</body>
</html>
```



7). Understanding JavaScript.

#### **Source Codes:**

```
<!DOCTYPE html>
<html>
<head>
       <title>Regular Expression</title>
       <script type="text/javascript">
              function validate()
                     var username=document.getElementById("uname").value;
                     var regx=/A00/;
                     if(regx.test(username))
                            alert("valid username");
                     else
                            alert("Invalid username");
                     }
       </script>
</head>
<body>
<form action="message.html">
       <input type="text" id="uname" placeholder="username"/>
       <button onclick="validate()">Submit</button>
</form>
</body>
</html>
```



8). Creating a Web page with back end in PHP and front end in JavaScript and hosting it on Apache Tomcat Server.

#### Source Code:

#### Form validation.php

```
<?php
if(isset($_POST['submit']))
{\$usrnm=\$_POST['username'];
$pss=$_POST['password'];
      if((strlen($usrnm)<=5) or (strlen($pss)<=8))
 echo "Username must be 5 characters long and Password must be 8 characters long";
}
?>
<html>
<head>
<title>Registration Form</title>
<link rel="stylesheet" href="form.css">
<script type="text/javascript" src="form.js">
</script>
</head>
<body>
 <div class="bc">
  <h1>Registration Form</h1>
   <img src="lgo.jpg" height="70%" >
  </div>
<form method="POST" action=" " name="regform" onsubmit="return validate()">
<fieldset>
<div class="abc">
 <label width="50%">Username:</label>
<input type="text" placeholder="Enter your username here" name="username" >
<label>Password:</label>
<input type="password" placeholder="Enter your password here" name="password"
id="a1">
 <br>
</div>
```

```
</fieldset>
<hr>
<fieldset>
<legend><b>Personal details<b></legend>
<label>First Name:</label>
<input type="text" placeholder="Type your first name here" id="a2">
<label>Last Name:</label>
 <input type="text" placeholder="Type your last name here" >
<label class="abcd">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
<hr>>
</fieldset>
<hr>>
 <fieldset>
 <legend><b>Contact Info</b></legend>
 <label>E-mail:</label>
   <input type="email" id="a3" placeholder="Enter your e-mail here">
  <label>Mobile No:</label>
  <input type="text" id="a4" placeholder="Enter your mobile number">
  <br>
  <fieldset>
  <legend><b>Address</b></legend>
  <label>Permanent Address:</label>
  <br>
<textarea name="name" rows="5" cols="40" id="a5" placeholder="Type your permanent
address here"></textarea>
  <label>Correspondence Address:</label>
  <textarea name="name" rows="5" cols="40" placeholder="Type your correspondence
address here"></textarea>
  </fieldset>
</fieldset>
<input type="submit" value="Submit" name="submit">
<input type="reset" value="Clear">
</form>
```

```
</body>
```

#### form.js

```
function validate()
{ var b= document.getElementById('a2').value;
var c= document.getElementsByName('ab').value;
var d=document.getElementById('a3').value;
var e= document.getElementById('a4').value;
var f=document.getElementById('a5').value;
if(b==" " | | b==0)
 alert("Please Enter First Name");
 return false;
}
if(c==" " | c==0)
{ alert("Please Select Gender");
return false;}
if(d==" " | | d==0)
{ alert("Please Enter a Valid E-mail");
return false;}
if(d==" " | | d==0 | | d.length<10)
{ alert("Please Enter a Valid Number");
return false;}
if(c==" ")
{ alert("Please Enter a valid address");
return false;}
}
```

#### form.css

```
body{box-sizing: border-box;
border: 3px solid green;
border-radius: 2px;
background-color: aqua}
legend{color: SlatebLUE;}
.abc{text-align: center;
margin: auto;}
input[type=text],input[type=Password],input[type=email],textarea{background-color: lightgrey;}
```

input[type=radio]{margin-left:70px; } .abcd{margin-left: 200px;}  $input[type=submit], input[type=reset] \{background-color: mediumseagreen;;\\$ width:40%; height: 30px;} .bc{ text-align: center; background-color: tomato;}



#### 9). Writing and understanding program in Python.

#### Source Code:

```
#Muliplication Table
num = int(input("Enter the number: "))
print("Multiplication Table of", num)
for i in range(1, 11):
    print(num,"X",i,"=",num * i)
```

```
Command Prompt
Microsoft Windows [Version 10.0.18363.592]
(c) 2019 Microsoft Corporation. All rights reserved.
C:\Users\gaurav>cd desktop
C:\Users\gaurav\Desktop>python Multiplication.py
Enter the number: 45
Multiplication Table of 45
45 X 1 = 45
45 X 2 = 90
45 X 3 = 135
45 X 4 = 180
45 X 5 = 225
45 X 6 = 270
45 X 7 = 315
45 X 8 = 360
45 X 9 = 405
45 X 10 = 450
C:\Users\gaurav\Desktop>_
```

# 10). Use Python Libraries like Math statistics to create programs for Scientific Computations.

#### Source Code:

```
print("This is a program to plot a graph between axes:-")
import matplotlib.pyplot as plt
k = int(input("Enter the number of elements:"))
print("Enter the elements to be plotted on the x-axis:")
print("Please select the type of input:")
print("0 for integer value")
print("1 for strings")
print("2 for float value")
choice1 = int(input())
if choice1==0:
 for i in range(0,k):
    element= int(input())
    x.append(element)
elif choice1==1:
    for i in range(0,k):
       element= input()
       x.append(element)
elif choice1==2:
      for i in range(0,k):
         element= float(input())
         x.append(element)
else:
       print("Invalid Choice")
print("Enter the elements to be plotted on the y-axis:")
y=[]
print("Please select the type of input:")
print("0 for integer value")
print("1 for strings")
print("2 for float value")
choice2 = int(input())
if choice2==0:
  for i in range(0,k):
    ele= int(input())
    y.append(ele)
elif choice2==1:
```

```
for i in range(0,k):
         ele= input()
         y.append(ele)
elif choice2==2:
       for i in range(0,k):
             ele= float(input())
             y.append(ele)
else:
       print("Invalid Choice")
plt.plot(x,y)
n=input("X label:")
m=input("Y label:")
g=input("Graph Title:")
plt.xlabel(n)
plt.ylabel(m)
plt.title(g)
plt.show()
```

```
C:\Users\gaurav\Desktop\Data\AP Lab File\10). Use Python Libraries like Math startistics to create programs for Scientific Computations>python plot.py
This is a program to plot a graph between axes:-
Enter the number of elements:3
Enter the elements to be plotted on the x-axis:
Please select the type of input:
0 for integer value
1 for strings
2 for float value
1
                                                                                                                                                                                                                                                             _ 0
 Gaurav
Gaurav
Deepak
Sombir
Enter the elements to be plotted on the y-axis:
Please select the type of input:
O for integer value
1 for strings
2 for float value
0
90
78
100
X label:Students
 X label:Students
Y label:Marks
Graph Title:Student Marks Graph
```

