

```
login.html - Notepad
File Edit View

<!DOCTYPE html>
<html>
  <head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link href="https://fonts.googleapis.com/css2?family=Merriweather&display=swap" rel="stylesheet">
    <link href="login_registration_styles.css" rel="stylesheet">
    <style>
      body{
        background-image: url("background.jpg");
      }
    </style>
  </head>
  <body>
    <div style="margin-top: 5%;">
      <h2>Login Page</h2>
      <form onsubmit="return check_login()" action="../week_7_and_8/servlet/Login1" method="post" name="login_form">
        <div class="grid-container">
          <label class="label" for="fname">Username :</label>
          <input class="label" type="text" id="fname" name="username" value="John">
        </div>
        <div class="grid-container">
          <label class="label" for="password">Password :</label>
          <input class="label" type="password" id="lname" name="password" value="*****">
        </div>

        <div class="buttons">
          <button class="button" type="submit">SUBMIT</button><br>
          <a href=forgot_password.html ><button class="button1" type="button" >Forgot Password</button></a>
        </div>

      </form>
      <h3>Not yet registered? <a href="register.html" style="color:rgb(58, 10, 17);">Register</a></h3>
    </div>
  </body>
  <script>
    function check_login(){
      let username=document.forms["login_form"]["username"].value;
      let password=document.forms["login_form"]["password"].value;
    }
  </script>
</html>
```

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let username=document.forms["login_form"]["username"].value;
let password=document.forms["login_form"]["password"].value;

console.log(username);
console.log(password);

if(username.length<6){
  alert('Username must be of atleast 6 characters.');
```

```

  console.log('Username must be of atleast 6 characters.');
```

```

  return false;
}
else if(password.length<8){
  alert("Password must be of atleast 8 characters");
  console.log("Password must be of atleast 8 characters");
}

else if(!password.match('(?!.*[A-Z])')){
  alert("Password should conatin atleast one uppercase letter");
  console.log("Password should conatin atleast one uppercase letter");
}
else if(!password.match('(?!.*[a-z])')){
  alert("Password should conatin atleast one lowercase letter");
  console.log("Password should conatin atleast one lowercase letter");
}
else if(!password.match('(?!.*[0-9])')){
  alert("Password should conatin atleast one numeric");
  console.log("Password should conatin atleast one numeric");
}
else if(!password.match('(?!.*[!@#$$%^&*])')){
  alert("Password should conatin atleast one special symbol");
  console.log("Password should conatin atleast one special symbol");
}
else{
  alert("login successful")
  console.log("success")
  return true
}
return false
}
</script>
</html>
```

Login.html

```
<!DOCTYPE html>
<html>
  <head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link href="https://fonts.googleapis.com/css2?family=Merriweather&display=swap" rel="stylesheet">
    <link href="login_registration_styles.css" rel="stylesheet">
    <style>
      body{
        background-image: url("background.jpg");
      }
    </style>
  </head>
  <body>
    <div style="margin-top: 5%;">
      <h2>Registration Page</h2>
      <form onsubmit="return check_register()" action="servlet/Register1" method="post" name="register_form" >
        <div class="grid-container">
          <label class="label" for="fname">Username :</label>
          <input class="label" type="text" name="username" value="John">
        </div>
        <div class="grid-container">
          <label class="label" for="lname">Password :</label>
          <input class="label" type="password" name="password" value="*****">
        </div>
        <div class="grid-container">
          <label class="label" for="lname">Confirm Password :</label>
          <input class="label" type="password" name="confirm_password" value="*****">
        </div>
        <div class="grid-container">
          <label class="label" for="lname">Email-id :</label>
          <input class="label" type="email" name="email_id" >
        </div>
        <div class="grid-container">
          <label class="label" for="lname">Mobile number :</label>
          <input class="label" type="number" name="mobile_no" value="*****">
        </div>
        <div class="grid-container">
          <label class="label" for="lname">Date of birth :</label>
          <input class="label" type="date" name="dob" value="*****">
        </div>
      </form>
    </div>
  </body>
</html>
```

```

    </div>
    <div class="grid-container">
        <label class="label" for="lname">Email-id :</label>
        <input class="label" type="email" name="email_id" >
    </div>
    <div class="grid-container">
        <label class="label" for="lname">Mobile number :</label>
        <input class="label" type="number" name="mobile_no" value="*****">
    </div>
    <div class="grid-container">
        <label class="label" for="lname">Date of birth :</label>
        <input class="label" type="date" name="dob" value="*****">
    </div>

    <div class="buttons">
        <button class="button" type="submit">SUBMIT</button><br>
    </div>

</form>
    <h3>Already registered? <a href="login.html" style="color:rgb(58, 10, 17);">Login</a></h3>
</div>
</body>

<script>
    function check_register(){
        let username=document.forms["register_form"]["username"].value;
        let password=document.forms["register_form"]["password"].value;
        let confirm_password=document.forms["register_form"]["confirm_password"].value;
        let email_id=document.forms["register_form"]["email_id"].value;
        let mobile_no=document.forms["register_form"]["mobile_no"].value;

        var email = /^[a-zA-Z0-9.!#$%&'*/+=?^_`{|}~-]+@[a-zA-Z0-9-]+(?:\.[a-zA-Z0-9-]+)*$/;
        var numbers = /^[0-9]+$/;

        if(username.length<6){
            alert('Username must be of atleast 6 characters.');
```

```

var numbers = /^[0-9]+$/;

if(username.length<6){
    alert('Username must be of atleast 6 characters.');
```

```

    console.log('Username must be of atleast 6 characters.');
```

```

    return false;
}
else if(password.length<8){
    alert("Password must be of atleast 8 characters");
    console.log("Password must be of atleast 8 characters");
}
else if(password!=confirm_password){
    alert("Confirm password must be the same of passsword");
    console.log("Confirm password must be the same of passsword");
}

else if(!password.match('(?=.*[A-Z])')){
    alert("Password should conatin atleast one uppercase letter");
    console.log("Password should conatin atleast one uppercase letter");
}
else if(!password.match('(?=.*[a-z])')){
    alert("Password should conatin atleast one lowercase letter");
    console.log("Password should conatin atleast one lowercase letter");
}
else if(!password.match('(?=.*[0-9])')){
    alert("Password should conatin atleast one numeric");
    console.log("Password should conatin atleast one numeric");
}
else if(!password.match('(?=.*[!@#%$^&*])')){
    alert("Password should conatin atleast one special symbol");
    console.log("Password should conatin atleast one special symbol");
}
else if(!email_id.match(email)){
    alert("Enter valid Email id");
    console.log("Enter valid Email id");
}
else if(mobile_no.length!=10){
    alert("Mobile number must contain 10 digits");
    console.log("Mobile number must contain 10 digits");
}
else if(!mobile_no.match(numbers)){
    alert("Mobile number must contain only digits");
    console.log("Mobile number must contain only digits");
}
else if(!mobile_no.charAt(0).match('(?!.*[6-9])')){
    alert("Mobile number must start with any number from 6-9");
    console.log("Mobile number must start with any number from 6-9");
}
else{
    alert("Registration successful")
    console.log("success")
    return true
}
return false

```

Register.html

```

forgot_password.html - Notepad
File Edit View

<!DOCTYPE html>
<html>
  <head>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link href="https://fonts.googleapis.com/css2?family=Merriweather&display=swap" rel="stylesheet">
    <link href="login_registration_styles.css" rel="stylesheet">
    <style>
      body{
        background-image: url("background.jpg");
      }
    </style>
  </head>
  <body>
    <div style="margin-top: 5%;">
      <h2>Reset your password here</h2>
      <form method="post" action="../week_7_and_8/servlet/UpdatePassword1">
        <div class="grid-container">
          <label class="label" for="fname">Username :</label>
          <input class="label" type="text" id="fname" name="username" value="John">
        </div>
        <div class="grid-container">
          <label class="label" for="pass">New Password :</label>
          <input class="label" type="password" id="pass" name="password" value="*****">
        </div>
        <div class="grid-container">
          <label class="label" for="lname">Confirm Password :</label>
          <input class="label" type="password" id="lname" name="conf_pass" value="*****">
        </div>

        <div class="buttons">
          <button class="button" type="submit" >Reset Password</button><br>
        </div>
      </form>
    </div>
  </body>
</html>

```

Web.xml



File Edit View

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="2.5"
  xmlns="http://java.sun.com/xml/ns/javaee"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
    http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd">
  <servlet>
    <servlet-name>Register1</servlet-name>
    <servlet-class>Register1</servlet-class>
  </servlet>

  <servlet-mapping>
    <servlet-name>Register1</servlet-name>
    <url-pattern>/servlet/Register1</url-pattern>
  </servlet-mapping>
  <servlet>
    <servlet-name>Login1</servlet-name>
    <servlet-class>Login1</servlet-class>
  </servlet>

  <servlet-mapping>
    <servlet-name>Login1</servlet-name>
    <url-pattern>/servlet/Login1</url-pattern>
  </servlet-mapping>
  <servlet>
    <servlet-name>UpdatePassword1</servlet-name>
    <servlet-class>UpdatePassword1</servlet-class>
  </servlet>

  <servlet-mapping>
    <servlet-name>UpdatePassword1</servlet-name>
    <url-pattern>/servlet/UpdatePassword1</url-pattern>
  </servlet-mapping>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
    <welcome-file>register.html</welcome-file>
    <welcome-file>login.html</welcome-file>
    <welcome-file>forgot_password.html</welcome-file>
  </welcome-file-list>
</web-app>
```

Register1.java

```
Register1.java - Notepad

File Edit View

import java.io.*;
import java.sql.*;
import java.util.Date;
import javax.servlet.ServletException;
import java.text.SimpleDateFormat;
import javax.servlet.http.*;
import javax.swing.tree.ExpandVetoException;

public class Register1 extends HttpServlet {
    public void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        String username=request.getParameter("username");
        String password=request.getParameter("password");
        String conf_password=request.getParameter("confirm_password");
        String email_id=request.getParameter("email_id");
        String mobile_no =request.getParameter("mobile_no");
        String dob =request.getParameter("dob");
        try{
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/servlets_jsp","root","Firoza@22");
            PreparedStatement ps=con.prepareStatement(
                "insert into week_7_and_8 values(?,?,?,?,?,?)");

            ps.setString(1,username);
            ps.setString(2,password);
            ps.setString(3,conf_password);
            ps.setString(4,email_id);
            ps.setString(5,mobile_no);
            ps.setString(6, dob);

            int i=ps.executeUpdate();
            if(i>0) {
                out.println("<script type='text/javascript'>");
                out.println("alert('Registration successful.. please login');");
                out.println("location='../login.html'");
                out.println("</script>");
            }
            else{
                out.print("You are unsuccessfully registered...");
            }
        }catch (Exception e2) {
            out.print("You are unsuccessfully registered...");
            System.out.println(e2);}

        out.close();
    }
}
```

Updatepwd.java



UpdatePassword1.java - Notepad

File Edit View

```
import java.io.*;
import java.sql.*;
import java.util.Date;
import javax.servlet.ServletException;
import java.text.SimpleDateFormat;
import javax.servlet.http.*;
import javax.servlet.RequestDispatcher;
import javax.swing.tree.ExpandVetoException;

public class UpdatePassword1 extends HttpServlet {
    public void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        String username=request.getParameter("username");
        String password=request.getParameter("password");
        String conf_password=request.getParameter("conf_pass");

        try{
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con=DriverManager.getConnection(
                "jdbc:mysql://localhost:3306/servlets_jsp","root","Firoza@22");

            PreparedStatement ps=con.prepareStatement(
                "update week_7_and_8 set password=?, conf_password=? where username=?");
            ps.setString(1,password);
            ps.setString(2,conf_password);
            ps.setString(3,username);

            int i=ps.executeUpdate();

            if(i>0){
                String n=request.getParameter("username");
                out.println("<html><body><h1>");
                out.println("Welcome "+n);
                out.println("</html></body></h1>");
            }
            else{
                out.println("<script type=\"text/javascript\">");
                out.println("alert('Username or password incorrect');");
                out.println("location='../forgot_password.html';");
                out.println("</script>");
            }
        } catch (Exception e2) {
            out.print("You are unsuccessful change password...");
            System.out.println(e2);}

        out.close();
    }
}
```


Login1.java



Login1.java - Notepad

File Edit View

```
import java.io.*;
import java.sql.*;
import java.util.Date;
import javax.servlet.ServletException;
import java.text.SimpleDateFormat;
import javax.servlet.http.*;
import javax.servlet.RequestDispatcher;
import javax.swing.tree.ExpandVetoException;

public class Login1 extends HttpServlet {
    public void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        String username=request.getParameter("username");
        String password=request.getParameter("password");

        try{
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con=DriverManager.getConnection(
                "jdbc:mysql://localhost:3306/servlets_jsp","root","Firoza@22");

            PreparedStatement ps=con.prepareStatement(
                "select * from week_7_and_8 where username=? and password=?");
            ps.setString(1,username);
            ps.setString(2,password);

            ResultSet rs=ps.executeQuery();

            if(rs.next()){
                String n=request.getParameter("username");
                out.println("<html><body><h1>");
                out.println("Welcome "+n);
                out.println("</html></body></h1>");
            }
            else{
                out.println("<script type=\"text/javascript\">");
                out.println("alert('Username or password incorrect');");
                out.println("location='../login.html'");
                out.println("</script>");
            }
        } catch (Exception e2) {
            out.print("You are unsuccessful login...");
            System.out.println(e2);}

        out.close();
    }
}
```

Jdbc

```
New Text Document.txt - Notepad

File Edit View

import java.sql.*;
import java.util.Scanner;
public class App {
    static Connection con;
    static String table_name;
    public static void create_table(String table_name) throws Exception{
        Statement st=con.createStatement();
        st.executeUpdate("create table if not exists '"+table_name+"' ( `id` numeric unique not null, `name` varchar(20) not null,`dept` varchar(20) not null);");
    }
    public static void display_values(String table_name) throws Exception{
        Statement st=con.createStatement();
        try{
            ResultSet rs=st.executeQuery("select * from "+table_name);
            System.out.println("\nid      name      dept");
            while(rs.next()){
                System.out.println(rs.getInt(1)+"      "+rs.getString(2)+"      "+rs.getString(3));
            }
        }
        catch(Exception ex){
            System.out.println("\n"+ex.getMessage()+"\n");
        }
    }
    public static void insert_values(String table_name,int id,String name,String dept) throws Exception{
        String insert = "insert into '"+table_name+"' values(?,?,?)";
        PreparedStatement pst = con.prepareStatement(insert);
        pst.setInt(1, id);
        pst.setString(2, name);
        pst.setString(3, dept);
        try{
            pst.executeUpdate();
        }catch(Exception ex){
            System.out.println(ex.getMessage());
        }
    }
    public static void delete_values(String table_name,int id) throws Exception{
        Statement st=con.createStatement();
        try{
            st.executeUpdate("delete from '"+table_name+"' where id = "+id);
        }
        catch(Exception ex){
            System.out.println(ex.getMessage());
        }
    }
    public static void update_values(String table_name,int id,String name,String dept) throws Exception{
        Statement st=con.createStatement();
        try{
            st.executeUpdate("update '"+table_name+"' set name = '"+name+"', dept = '"+dept+"' where id = "+id);
        }
        catch(Exception ex){
            System.out.println(ex.getMessage());
        }
    }
    public static void main(String[] args) throws Exception {
        Scanner sc=new Scanner(System.in);

        Class.forName("com.mysql.cj.jdbc.Driver");
        con=DriverManager.getConnection("jdbc:mysql://localhost:3306/jdbc_mysql","root","Firoza@22");
        while(true){

```

```

    }
}

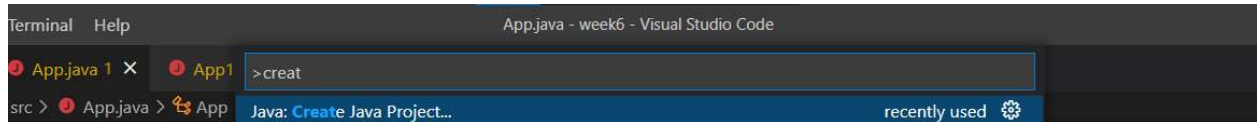
public static void main(String[] args) throws Exception {
    Scanner sc=new Scanner(System.in);

    Class.forName("com.mysql.cj.jdbc.Driver");
    con=DriverManager.getConnection("jdbc:mysql://localhost:3306/jdbc_mysql","root","Firoza@22");
    while(true){
        System.out.println("\n\n1. Create table \n2. Display values \n3. Insert values \n4. Delete values \n5. Update values \n6. Exit\n");
        System.out.println("Enter your choice");
        int ch=Integer.valueOf(sc.nextLine());
        switch(ch){
            case 1:{
                System.out.println("Enter the table Name : ");
                String table_name =sc.nextLine();
                create_table(table_name);
            };break;
            case 2:{
                System.out.println("Enter the table Name : ");
                String table_name = sc.nextLine();
                display_values(table_name);
            };break;
            case 3:{
                System.out.println("Enter the table Name : ");
                String table_name = sc.nextLine();
                System.out.println("Enter id");
                int id = Integer.valueOf(sc.nextLine().trim());
                System.out.println("Enter name");
                String name = sc.nextLine().trim();
                System.out.println("Enter department");
                String dept = sc.nextLine().trim();
                insert_values(table_name,id,name,dept);
            };break;
            case 4:{
                System.out.println("Enter the table Name : ");
                String table_name = sc.nextLine().trim();
                System.out.println("Enter id that is to be deleted");
                int id = Integer.valueOf(sc.nextLine().trim());
                delete_values(table_name,id);
            };break;
            case 5:{
                System.out.println("Enter the table Name : ");
                table_name = sc.nextLine().trim();
                System.out.println("Enter id that is to be updated");
                int id = Integer.valueOf(sc.nextLine().trim());
                System.out.println("Enter updated name");
                String name = sc.nextLine().trim();
                System.out.println("Enter updated department");
                String dept = sc.nextLine().trim();
                update_values(table_name,id,name,dept);
            };break;
            default:{System.exit(0);};
        }
    }
}
}
}

```

MySQL Installer :

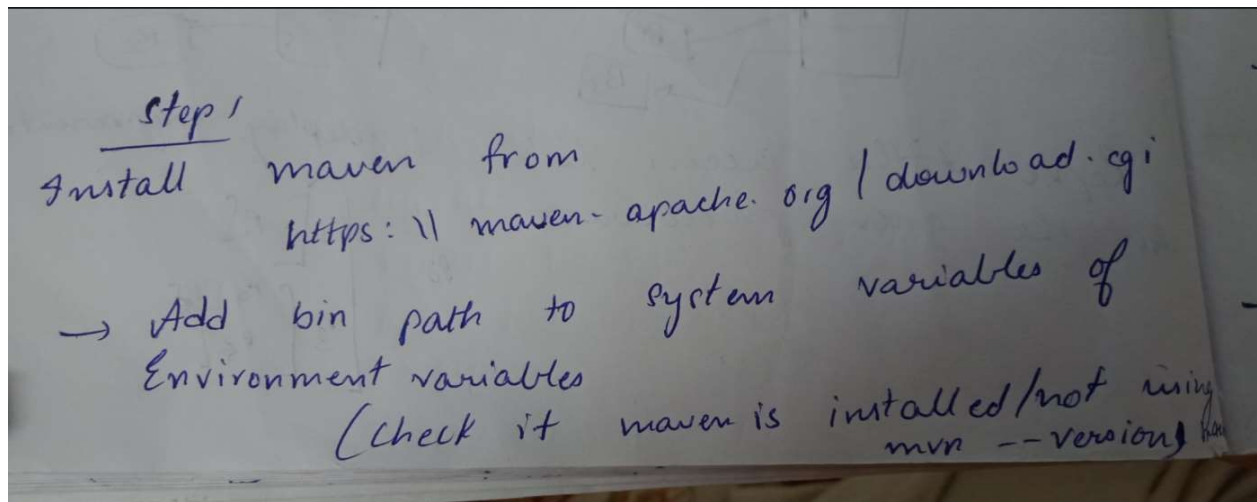
- (1) Download MySQL Installer 8.0.28 from [mysql.com](https://dev.mysql.com/downloads/) downloads.
- (2) Next complete the installation process :
- (3) Install Extension Pack for Java in VS code
- (4) Open MySQL Workbench and create a database :
- (5) Open VS code and create a new java project in command palette :



Set the location and enter a name for the java project.

(6) Add the jar file - mysql-connector-java-8.0.28 to the Referenced libraries of JAVA PROJECTS :

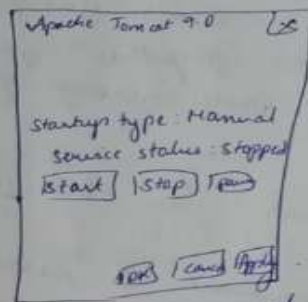
(7) Edit the code in src/App.java and run the program.



→ step 2 :

Download & install tomcat from
<https://tomcat.apache.org/download-90.cgi>
Download tomcat 9.0 for windows 32 bit/64 bit
.exe file.

→ Run the executable file & install tomcat
by select java jdk file path & install tomcat
Run the application.



select startup type manual & start the application.

→ Copy the path where tomcat is installed.

Search Environment variables in start menu.

Create a system variable named CATALINA_HOME
& copy the path as value. (C:\Program Files\Apache Software
Foundation\tomcat 9.0)

→ Edit path variable of system variables by adding
new path.

%. CATALINA_HOME%\bin

→ Make sure Java is installed and JDK
path is added as system variable named JAVA-
HOME & also add the bin path in
path of system variables.

→ Add ~~class~~ path of lib folder of tomcat 9.0
as class path in system variables.

→ Open Application in IDE IntelliJ
https://www.jetbrains.com/idea/

→ Open terminal window and file present
in `conf` folder of IntelliJ is installed &
make following changes

Add the below data under `credentials`
manager & admin roles

```
<role roleName="manager-gui"/>
```

```
<role roleName="admin-gui"/>
```

```
<user username="guyathari" password="1234"  
roles="manager-gui, admin-gui"/>
```

~~etc~~

→ Open terminal window in browser & open
Manager app.

Type the username & password created.
All the webapps created are available here.

→ Open VS Code

→ Install the below extensions:

- * Debugger for Java

- * Extension pack for Java

- * Java Debug

- * Java Debugger

- * Java Language support

- * Java Run

- * Maven for Java

- * MySQL

- * Project Manager for Java

- * Red hat commons

- * XML

- * Test Runner for Java

- Click on settings
- ~~Select~~ Search for create java project & select it
- Select Maven
- Select Maven- archetype- webapps
- Select latest version (1.4)
- Enter group id for project
Eg:- com.example
- Input artifact id for project
Eg:- demo
- select the folder where you want your java project to be present.
- Maven dependencies will be installed & a Java- Maven project will be created.

Go to webapps folder present in structure :-

```

src ----- main ----- java ----- com ----- gnu -----
target                                     |
                                         |----- webapp ----- webint
Pom.xml.                                |----- index.html

```

Copy the files present in web app.

- Go to webapps in tomcat 9.0. ↓
- Create a new folder & paste them
- Create a new folder ~~named~~ named classes in webInf folder.

- Go to dev.mysql.com/downloads/windows/installer/8.0.html
4 Download MySQL ~~to~~

- Also, go to <https://mysql.com/downloads/>
- Click on MySQL Community (GPL) Downloads.
- Select Connector/J
- Select platform independent

Select operating system:	
Microsoft windows	<input checked="" type="checkbox"/>
Linux	<input type="checkbox"/>
Mac OS X	<input type="checkbox"/>
platform Independent	<input type="checkbox"/>

- Download Zip file (MySQL-connector-j-java)
- Extract the Zip file
- Copy the 'mysql-connector-java-8.0.28.jar' and paste it in lib folder of tomcat 9.0.

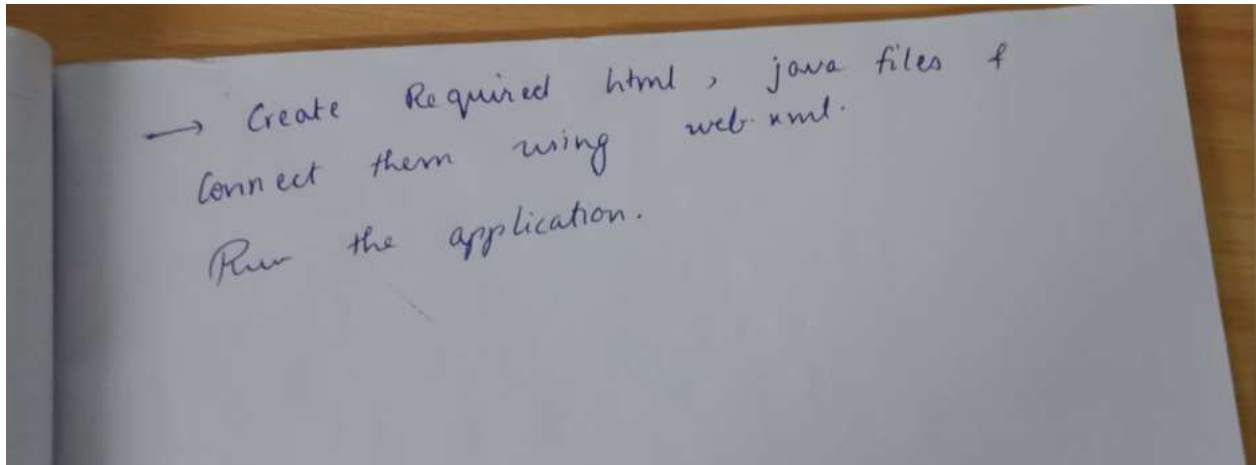
→ Go to MySQL Workbench.

Create a Schema.

create schema week 7;

Create a table with all required parameter list

create table servlets (Name varchar(255), Password varchar(255), Confpassword varchar(255), email varchar(255), phone varchar(255), dob ~~date~~ varchar(255), address varchar(255));



Program :

XML file :

```
<?xml version="1.0" ?>
<!--<?xml-stylesheet type="text/xsl" href="week5_1.xsl"?> -->
<?xml-stylesheet type="text/css" href="week5.css"?>

<!DOCTYPE class SYSTEM "week5.dtd">

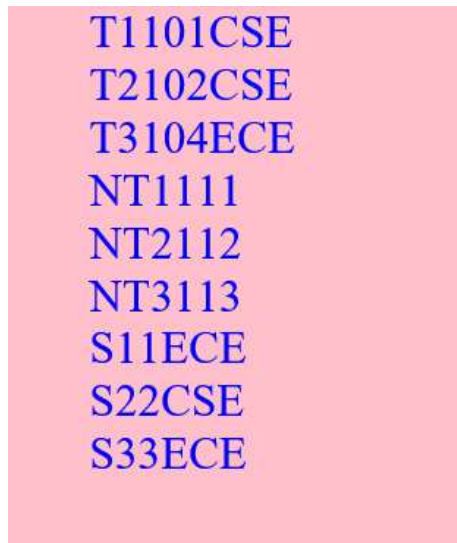
<class>
<teaching clg="A">
<name>T1</name><id>101</id><dept>CSE</dept>
</teaching>
<teaching clg="B">
<name>T2</name><id>102</id><dept>CSE</dept>
</teaching>
<teaching clg="C">
<name>T3</name><id>104</id><dept>ECE</dept>
</teaching>
<non_teaching clg="A">
<name>NT1</name><id>111</id>
</non_teaching>
<non_teaching clg="B">
<name>NT2</name><id>112</id>
</non_teaching>
<non_teaching clg="C">
<name>NT3</name><id>113</id>
</non_teaching>
<student clg="A">
<name>S1</name><rollno>1</rollno><dept>ECE</dept>
</student>
<student clg="B">
<name>S2</name><rollno>2</rollno><dept>CSE</dept>
```

```
</student>
<student clg="C">
<name>S3</name><rollno>3</rollno><dept>ECE</dept>
</student>
</class>
```

CSS file : week5.css

```
class
{
background-color: pink;
}
teaching,non_teaching,student
{
font-size:25px;
display:block;
color: blue;
margin-left: 50px;
}
```

Output :



XML document validating against DTD :

DTD file : week5.dtd

```
<!ELEMENT class (teaching+,non_teaching+,student+)>
<!ELEMENT teaching (name,id,dept)>
<!ATTLIST teaching clg CDATA #REQUIRED>
<!ELEMENT non_teaching (name,id)>
<!ATTLIST non_teaching clg CDATA #REQUIRED>
```

```
<!ELEMENT student (name,rollno,dept)>
<!ATTLIST student clg CDATA #REQUIRED>
<!ELEMENT name (#PCDATA)>
<!ELEMENT id (#PCDATA)>
<!ELEMENT rollno (#PCDATA)>
<!ELEMENT dept (#PCDATA)>
```

Output :

No errors were found

The following files have been uploaded so far:

[XML document:](#) 

[week5.dtd](#) 

Click on any file name if you want to edit the file.

XML document validating against Schema:

XSD file : week5.xsd

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns="http://www.javatpoint.com"
elementFormDefault="qualified">
<xs:element name="class">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="teaching" maxOccurs="unbounded">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="name" type="xs:string"/>
            <xs:element name="id" type="xs:integer"/>
            <xs:element name="dept" type="xs:string"/>
          </xs:sequence>
            <xs:attribute name="clg" type="xs:string"/>
          </xs:complexType>
        </xs:element>
        <xs:element name="non_teaching" maxOccurs="unbounded">
          <xs:complexType>
```



```

        <xs:sequence>
        <xs:element name="name" type="xs:string"/>
        <xs:element name="id" type="xs:integer"/>
        </xs:sequence>
        <xs:attribute name="clg" type="xs:string"/>
        </xs:complexType>
    </xs:element>
    <xs:element name="student" maxOccurs="unbounded">
    <xs:complexType>
        <xs:sequence>
        <xs:element name="name" type="xs:string"/>
        <xs:element name="rollno" type="xs:integer"/>
        <xs:element name="dept" type="xs:string"/>
        </xs:sequence>
        <xs:attribute name="clg" type="xs:string"/>
        </xs:complexType>
    </xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>

```

Output :

No errors were found

The following files have been uploaded so far:

XML document: 

XML schema: 

Click on any file name if you want to edit the file.

Displaying contents of XML document in a table using XSL :

XSL file : week5_1.xsl

```

<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

<xsl:template match="/">
    <html>
    <body>
<!--Teaching-->
    <h2>Teaching</h2>

```

```

<table border="1">
  <tr bgcolor="#FFA500">
    <th>College</th>
    <th>Name</th>
    <th>id</th>
    <th>Dept</th>
  </tr>
  <xsl:for-each select="class/teaching">
    <tr>
      <td> <xsl:value-of select="@clg"/> </td>
      <td><xsl:value-of select="name"/></td>
      <td><xsl:value-of select="id"/></td>
      <xsl:choose>
        <xsl:when test="dept='CSE'">
          <td bgcolor=" #ADD8E6">
            <xsl:value-of select="dept"/></td>
          </xsl:when>
          <xsl:otherwise>
            <td bgcolor=" #FFB6C1"><xsl:value-of select="dept"/></td>
          </xsl:otherwise>
        </xsl:choose>
      </tr>
    </xsl:for-each>
  </table>

```

```

<!-- Non Teaching -->
<h2>Non Teaching</h2>
<table border="1">
  <tr bgcolor="#FFA500">
    <th>College</th>
    <th>Name</th>
    <th>id</th>
  </tr>
  <xsl:for-each select="class/non_teaching">
    <tr>
      <td> <xsl:value-of select="@clg"/> </td>
      <td><xsl:value-of select="name"/></td>
      <td><xsl:value-of select="id"/></td>
    </tr>
  </xsl:for-each>
</table>

```

```

<!-- Student -->
<h2>Student</h2>
<table border="1">
  <tr bgcolor="#FFA500">
    <th>College</th>

```

```

        <th>Name</th>
        <th>Roll no</th>
        <th>Dept</th>
    </tr>
    <xsl:for-each select="class/student">
    <tr>
    <td> <xsl:value-of select="@clg"/> </td>
    <td><xsl:value-of select="name"/></td>
    <td><xsl:value-of select="rollno"/></td>
    <xsl:choose>
        <xsl:when test="dept='CSE'">
            <td bgcolor=" #ADD8E6">
                <xsl:value-of select="dept"/></td>
            </xsl:when>
            <xsl:otherwise>
                <td bgcolor=" #FFB6C1"><xsl:value-of select="dept"/></td>
            </xsl:otherwise>
        </xsl:choose>

    </tr>
    </xsl:for-each>
</table>
<h4>CSE - blue color</h4>
<h4>ECE - pink color</h4>
</body>
</html>
</xsl:template>

</xsl:stylesheet>

```

Output :

Teaching

College	Name	id	Dept
A	T1	101	CSE
B	T2	102	CSE
C	T3	104	ECE

Non Teaching

College	Name	id
A	NT1	111
B	NT2	112
C	NT3	113

Student

College	Name	Roll no	Dept
A	S1	1	ECE
B	S2	2	CSE
C	S3	3	ECE

CSE - blue color

ECE - pink color

login .html js

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <link rel="stylesheet" href="all.css">
```

```
</head>
```

```
<body>
```

```
    <div class="register">
```

```
        <label>Name</label>
```

```
        <input id="username" placeholder="Enter Name" />
```

```
        <label>Password</label>
```

```
        <input type="password" id="password" placeholder="Enter Password" />
```

```
        <button onclick=validate()> Submit </button>
```

```
        <p>Don't have an account?<a href="register.html">Sign Up</a> </p>
```

```
        <p>Forgot Password? <a href="forgot.html">Click here</a> </p>
```

```
    </div>
```

```
    <script>
```

```
        function validate() {
```

```
            let username = document.getElementById('username').value
```



```

let password = document.getElementById('password').value
let i=0;
let j=0;
let k=0;
for (let index = 0; index < password.length; index++) {
    var element = password[index];
    if(element.charCodeAt(0)>=65 && element.charCodeAt(0)<=90){
        j=1
    }
    if(element.charCodeAt(0)>=58 && element.charCodeAt(0)<=64){
        k=1
    }
    if(element.charCodeAt(0)>=48 && element.charCodeAt(0)<=57){
        i=1
    }
}

if(username.length<6){
    alert("username length is not sufficient")
    location.reload()
}
else if(password.length<8){
    alert("password length is not sufficient")
    location.reload()
}
else if(j==0){
    alert("Password must have a capital letter")
    location.reload()
}
else if(k==0){
    alert("Password must have a special symbol")
    location.reload()
}
else if(i==0){
    alert("Password must have a number")
    location.reload()
}
}
</script>
</body>
</html>

```

Register.html js
<!DOCTYPE html>

```

<html>
<head>
  <link rel="stylesheet" href="all.css">
</head>
<body>
  <div class="register">
    <label>Name</label>
    <input id="username" placeholder="Enter Name" />
    <label>Password</label>
    <input type="password" id="password" placeholder="Enter Password" />
    <label>Confirm Password</label>
    <input type="password" id="confirmpassword" placeholder="Enter Password
Again" />
    <label >Email</label>
    <input id="email" placeholder="Enter email" />
    <label >Mobile Number</label>
    <input id="mobile" placeholder="Enter mobile number" />
    <label>DOB</label>
    <input type="date" placeholder="Enter Date of Birth" />
    <label>Address</label>
    <textarea placeholder="Enter Address"></textarea>
    <label>Gender</label>
    <select>
      <option>Male</option>
      <option>Female</option>
      <option>Others</option>
    </select>
    <button onclick=validate()> Submit </button>
    <p>Already have an account?<a href="login.html">Log in</a> </p>
  </div>
  <script>
    function validate() {
      let username = document.getElementById('username').value
      let password = document.getElementById('password').value
      let confirmpassword =
document.getElementById('confirmpassword').value
      let email = document.getElementById('email').value
      let mobile = document.getElementById('mobile').value
      let i=0;
      let j=0;
      let k=0;
      for (let index = 0; index < password.length; index++) {
        var element = password[index];
        if(element.charCodeAt(0)>=65 && element.charCodeAt(0)<=90){

```

```

        j=1
    }
    if(element.charCodeAt(0)>=58 && element.charCodeAt(0)<=64){
        k=1
    }
    if(element.charCodeAt(0)>=48 && element.charCodeAt(0)<=57){
        i=1
    }
}
if(username.length<6){
    alert("username length is not sufficient")
    location.reload()
}
else if(password.length<8){
    alert("password length is not sufficient")
    location.reload()
}
else if(j==0){
    alert("Password should must have a capital letter")
    location.reload()
}
else if(k==0){
    alert("Password should must have a special symbol")
    location.reload()
}
else if(i==0){
    alert("Password should must have a number")
    location.reload()
}
else if(password!=confirmpassword){
    alert("Passwords doesn't match")
    location.reload()
}
else if(!email.includes("@gmail.com")){
    alert("Enter correct email")
    location.reload()
}
else if(!(mobile.charCodeAt(0)>=54 && mobile.charCodeAt(0)<=57)){
    alert("Enter correct number")
    location.reload()
}
else if(mobile.length!=10){
    alert("Longer/shorter Number is given")
    location.reload()
}

```

```

        }
    }
</script>
</body>
</html>

```

Home:

```

<!DOCTYPE html>
<html>
<head>
    <title>Home page</title>
</head>
<frameset rows="20%,80%">
    <frame src="frame1.html">
    <frameset cols="10%,90%">
        <frame src="frame2.html">
        <frame src="frame3.html" name="right">
    </frameset>
</frameset>
</html>

```

Frame1:

```

<!DOCTYPE html>
<html>
<head>
<style>
    h1{
        font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
        font-size: 40px;
    }
    img{
        padding-top: 10px;
    }
    body{
        background-color:aqua;
    }
</style>
</head>
<body>
    <div style="display:flex">
        
        <h1 style="padding-left:70px">Gayatri Vidya Parishad College of
Engineering(Autonomous)</h1>

```

```
</div>
</body>
</html>
```

Frame2:

```
<!DOCTYPE html>
<html>
<head>
  <style>
    a{
      text-decoration: none;
      font-family:Georgia, 'Times New Roman', Times, serif;
      color: black;
      font-size: 25px;
      padding-bottom: 20px;
      padding-top: 20px;
    }
  </style>
</head>
<body style="background-color:tomato; display:grid;">
  <a href="login.html" target="right">Login</a>
  <a href="register.html" target="right">Register</a>
  <a href="contact.html" target="right">Contact Us</a>
</body>
</html>
```

FRAME-3:

```
<!DOCTYPE html>
<html>
<head>
</head>
  <marquee style="background-color:blueviolet" width="100%" height="100%" direction="left"
scrollamount=20>
  
</marquee>
</html>
```

FORGOT:

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="all.css">
</head>
```

```
<body>
  <div class="register">
    <label>New Password</label>
    <input placeholder="Enter new password" />
    <label>Confirm Password</label>
    <input placeholder="Enter Password again" />
    <button> Change </button>
  </div>
</body>
</html>
```