# **ADVANCE JAVA (3360707)**



# VVP ENGINEERING COLLEGE

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G2



# V.V.P. ENGINEERING COLLEGE, RAJKOT

## **Department Of Computer Engineering**

#### **VISION OF THE DEPARTMENT**

Transforming students into globally efficient professionals with moral values.

### **MISSION OF THE DEPARTMENT**

To provide a strong foundation of computer engineering through effective teaching learning process.

To enhance industry linkage & alumni network for better placement and real-world exposure.

To provide various opportunities & platforms for all round development of students & encourage them for value-based practices.

### Assignment - 1

1. Write a TextBrowser to fetch remote web page content using URL and URLConnection class.

```
import java.io.InputStream;
import java.net.URL;
import java.net.URLConnection;
import java.util.ArrayList;
import java.util.Scanner;
import java.util.regex.Matcher;
import java.util.regex.Pattern;
public class TextBrowser {
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter url you want to search: ");
    String urls = sc.nextLine();
    try {
      // URL homepage = new URL("https://www.gtu.ac.in/");
       URL homepage = new URL(urls);
       URLConnection homepageconnection = homepage.openConnection();
       System.out.println("Content Length: " + homepageconnection.getContentLength());
      System.out.println("Content Encoding: " + homepageconnection.getContentEncoding());
       System.out.println("Content Type: " + homepageconnection.getContentType());
       InputStream connection = homepageconnection.getInputStream();
       int c:
       String content = "";
       while ((c = connection.read()) != -1)  {
         content += (char) c;
      // System.out.println("Content : " + content);
      ArrayList<String> result = new ArrayList<>();
       9+&@#/%=~ |]";
      // String regex = "<a\+(?:[^>]*?\+)?href=([\"])(.*?)\\1";
      Pattern p = Pattern.compile(regex);
      Matcher m = p.matcher(content);
       while (m.find()) {
         result.add(m.group());
```

```
for (String l : result) {
        System.out.println(l);
}

System.out.println("Total Links Are : " + result.size());
        connection.close();
} catch (Exception e) {
        System.out.println("Connection Error!");
    }
}
```

### 2. Write a P2P chat application.

```
import java.io.InputStream;
import java.io.OutputStream;
import java.net.ServerSocket;
import java.net.Socket;
import java.util.Scanner;
public class Chat {
  public static void main(String[] args) throws Exception {
     Scanner in = new Scanner(System.in);
     String host = "";
     int port = 0;
     String im = "";
     System.out.println("Enter port you want to start:");
     int serverPort = Integer.parseInt(in.nextLine());
     System.out.println("Server started Listening on port " + serverPort + "...!");
     new ChatServer(serverPort);
     while (true) {
       if (host.equals("")) {
          System.out.println("Enter cool Name : ");
          im = in.nextLine();
          host = "localhost";
          System.out.println("Enter Port to chat with: ");
          port = in.nextInt();
       String msg = im + ": " + in.nextLine();
       send(msg, host, port);
```

```
public static void send(String msg, String rhost, int rport) throws Exception {
     Socket client = new Socket(rhost, rport);
     OutputStream os = client.getOutputStream();
     os.write(msg.getBytes());
     client.close();
class ChatServer implements Runnable {
  int port = 0;
  public ChatServer(int port) {
     this.port = port;
    Thread t = new Thread(this);
    t.start();
  }
  @Override
  public void run() {
    receive();
  public void receive() {
     try {
       ServerSocket server = new ServerSocket(port);
       while (true) {
          Socket client = server.accept();
          InputStream is = client.getInputStream();
          int c;
          String msg = "";
          while ((c = is.read()) != -1) {
            msg += (char) c;
          System.out.println(msg);
     } catch (Exception e) {
       e.printStackTrace();
```

# 3. Write a program to generate reverse string using Socket and ServerSocket class.

#### **Client:**

// First run Server.java File with any port number and use that port to connect with client to get Reverse String of Input.

```
import java.io.*;
import java.net.Socket;
import java.util.Scanner;
public class ReverseString {
  public static void main(String[] args) throws Exception {
    try {
       Scanner sc = new Scanner(System.in);
       System.out.print("Enter your port : ");
       int port = sc.nextInt();
       sc.nextLine();
       Socket s = new Socket("localhost", port);
       if (s.isConnected()) {
          System.out.println("Connected to Server....");
       while (true) {
          System.out.print("Enter String to reverse : ");
         String inputStr = sc.nextLine();
         DataOutputStream dataOut = new DataOutputStream(s.getOutputStream());
         dataOut.writeUTF(inputStr);
         DataInputStream dataIn = new DataInputStream(s.getInputStream());
         String revStr = dataIn.readUTF();
          System.out.println("Reversed String : " + revStr);
          System.out.println();
     } catch (Exception e) {
       System.out.println("Client System Error!\n" + e);
}
Server:
// This server is for ReverseString Program.
import java.io.DataInputStream;
import java.io.DataOutputStream;
import java.net.ServerSocket;
import java.net.Socket;
import java.util.Scanner;
import static java.lang.Integer.parseInt;
public class Server {
```

```
public static void main(String[] args) throws Exception {
    try {
       Scanner sc = new Scanner(System.in);
       System.out.print("Enter Port Number : ");
       int port = sc.nextInt();
       sc.nextLine();
       System.out.println("Server is running ... !");
       ServerSocket ss = new ServerSocket(port);
       new ChatServers(ss.accept());
     } catch (Exception e) {
       System.out.println("Server Error : " + e);
class ChatServers extends Thread {
  Socket s;
  public ChatServers(Socket socket) {
    s = socket;
    Thread t = new Thread(this);
    t.start();
  @Override
  public void run() {
    receive();
  public void receive() {
    try {
       while (true) {
         DataInputStream dataIn = new DataInputStream(s.getInputStream());
         String str = dataIn.readUTF();
         StringBuffer rev = new StringBuffer();
         rev.append(str);
         rev = rev.reverse();
         String revStr = new String(rev);
         DataOutputStream dataOut = new DataOutputStream(s.getOutputStream());
         dataOut.writeUTF(revStr);
     } catch (Exception e) {
       System.out.println("Server Error n'' + e);
                                                     } }
```

## **Assignment - 2**

### 4. Write a servlet controller for login module.

```
LoginController:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package com.vvp.web;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
* @author Dishen Makwana
public class LoginController extends HttpServlet {
   * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
   * methods.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
       response.setContentType("text/html;charset=UTF-8");
       try (PrintWriter out = response.getWriter()) {
          /* TODO output your page here. You may use following sample code. */
          String uName = request.getParameter("username");
          String pwd = request.getParameter("password");
          HttpSession session = request.getSession();
          if (uName.equals("admin") && pwd.equals("12345")) {
               session.setAttribute("User", "admin");
               Cookie c = new Cookie("cookie text", "admin");
```

c.setMaxAge(60 \* 60 \* 24 \* 15);

```
response.addCookie(c);
//
                response.sendRedirect("table.html");
                response.sendRedirect("table.jsp");
          } else {
//
           response.sendRedirect("login.html");
                response.sendRedirect("login.jsp?msg=Something is Wrong, Check you
Username and Password and Try Again.");
        }
  }
  // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the
left to edit the code.">
  /**
   * Handles the HTTP <code>GET</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
   */
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
        processRequest(request, response);
  /**
   * Handles the HTTP <code>POST</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
   */
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
        processRequest(request, response);
   * Returns a short description of the servlet.
   * @return a String containing servlet description
  @Override
  public String getServletInfo() {
        return "Short description";
        }
```

### 5. Write a program to generate multiplication Table.

```
TableController:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package com.vvp.web;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
* @author Dishen Makwana
public class TableController extends HttpServlet {
   * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
   * methods.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException
                              if an I/O error occurs
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
       HttpSession session = request.getSession();
       if (session.getAttribute("User") == null) {
         response.sendRedirect("login.html");
       } else {
         /* TODO output your page here. You may use following sample code. */
         int number = Integer.parseInt(request.getParameter("number"));
         out.println("<!DOCTYPE html>");
         out.println("<html>");
         out.println("<head>");
         out.println("<title>Servlet Multiplication</title>");
         out.println("</head>");
         out.println("<body>");
```

out.println("<h1 align='center' >Generated Table</h1>");

```
out.println("<h3 align='center' > Number : " + number + "</h3>");
       out.println("");
       for (int i = 1; i < 11; i++) {
         out.println("");
         out.println("");
         out.println(" " + number + " x " + i + " = " + number * i + " ");
         out.println("");
         out.println("");
       out.println("");
       out.println("</body>");
       out.println("</html>");
    }
  }
}
// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the
// + sign on the left to edit the code.">
* Handles the HTTP <code>GET</code> method.
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException
                          if an I/O error occurs
*/
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
  processRequest(request, response);
}
* Handles the HTTP <code>POST</code> method.
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException
                         if an I/O error occurs
*/
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
  processRequest(request, response);
* Returns a short description of the servlet.
```

```
* @return a String containing servlet description
*/
@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>
}
```

### 6. Write a Servlet that counts number of hits of a particular page.

```
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package com.vvp.web;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
* @author Dishen Makwana
public class Visitor extends HttpServlet {
  private int visitorCounter;
  public void init() {
       // Reset hit counter.
       visitorCounter = 0;
  }
   * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
   * methods.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
```

```
try (PrintWriter out = response.getWriter()) {
          /* TODO output your page here. You may use following sample code. */
          visitorCounter++;
          HttpSession session = request.getSession();
          out.println("<h3>Visitors: " + visitorCounter + "</h3>\n");
  }
  // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the
left to edit the code.">
  /**
   * Handles the HTTP <code>GET</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
       processRequest(request, response);
  /**
   * Handles the HTTP <code>POST</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
  */
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
       processRequest(request, response);
   * Returns a short description of the servlet.
   * @return a String containing servlet description
  @Override
  public String getServletInfo() {
       return "Short description";
  }// </editor-fold>
```

### **Assignment - 3**

### 7. Develop eCommerce application using Servlet and HTML.

```
Index.html:
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="utf-8">
 <meta content="width=device-width, initial-scale=1.0" name="viewport">
 <title>Ecommerce</title>
 <meta content="" name="description">
 <meta content="" name="keywords">
 <!-- Favicons -->
 <link href="assets/img/favicon.png" rel="icon">
 link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">
 <!-- Google Fonts -->
 link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i
|Roboto:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,
600i,700,700i"
  rel="stylesheet">
 <!-- Vendor CSS Files -->
 <link href="assets/vendor/aos/aos.css" rel="stylesheet">
 link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
 <link href="assets/vendor/bootstrap-icons/bootstrap-icons.css" rel="stylesheet">
 link href="assets/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
 k href="assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
 k href="assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
 <!-- Template Main CSS File -->
 <link href="assets/css/style.css" rel="stylesheet">
</head>
<body>
 <!-- ===== Header ===== -->
 <header id="header" class="d-flex align-items-center">
  <div class="container d-flex align-items-center justify-content-between">
   <h1 class="logo"><a href="index 1.html">DM-Mart</a></h1>
   <!-- Uncomment below if you prefer to use an image logo -->
   <a href="index 1.html" class="logo"><img src="assets/img/logo.png" alt=""></a>
```

```
<nav id="navbar" class="navbar">
    <111>
     <a class="nav-link scrollto active" href="index 1.html">Home</a>
     <a class="nav-link scrollto" href="#portfolio">Portfolio</a>
     <a class="nav-link scrollto" href="#footer">Contact</a>
     <a class="nav-link scrollto" href="viewcart.do">View Cart</a>
    </u1>
    <i class="bi bi-list mobile-nav-toggle"></i>
   </nav><!-- navbar -->
  </div>
 </header><!-- End Header -->
 <main id="main">
  <!-- ===== Portfolio Section ====== -->
  <section id="portfolio" class="portfolio">
   <div class="container" data-aos="fade-up">
    <div class="section-title">
     <h2>Portfolio</h2>
     <h3>Check our <span>Portfolio</span></h3>
     Ut possimus qui ut temporibus culpa velit eveniet modi omnis est adipisci expedita at
voluptas
      atque vitae
      autem.
    </div>
    <div class="row" data-aos="fade-up" data-aos-delay="100">
     <div class="col-lg-12 d-flex justify-content-center">
      ul id="portfolio-flters">
        data-filter="*" class="filter-active">All
        data-filter=".filter-app">App
        data-filter=".filter-card">Card
        data-filter=".filter-web">Web
      </u1>
     </div>
    </div>
    <div class="row portfolio-container" data-aos="fade-up" data-aos-delay="200">
     <div class="col-lg-4 col-md-6 portfolio-item filter-app">
      <img src="assets/img/portfolio/portfolio-1.jpg" class="img-fluid" alt="">
      <div class="portfolio-info">
        <h4>App 1</h4>
        $ 450
        <a href="assets/img/portfolio/portfolio-1.jpg" data-gallery="portfolioGallery"
         class="portfolio-lightbox preview-link" title="App 1"><i class="bx bx-plus"></i></a>
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx
bx-link"></i></a>
        <br>
        <form action="addtocart.do" method="get">
         <input type="number" name="qty" value="1" />
```

```
<input type="hidden" name="pid" value="1" />
         <!--<input type="hidden" name="price" value="450" />-->
         <input type="submit" value="Add to Cart" />
        </form>
       </div>
      </div>
      <div class="col-lg-4 col-md-6 portfolio-item filter-web">
       <img src="assets/img/portfolio/portfolio-2.jpg" class="img-fluid" alt="">
       <div class="portfolio-info">
        <h4>App 2</h4>
        $ 660
        <a href="assets/img/portfolio/portfolio-2.jpg" data-gallery="portfolioGallery"
         class="portfolio-lightbox preview-link" title="Web 3"><i class="bx bx-plus"></i></a>
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx
bx-link"></i>></a>
        <br>
        <form action="addtocart.do" method="get">
         <input type="number" name="qty" value="1" />
         <input type="hidden" name="pid" value="2" />
         <!--<input type="hidden" name="price" value="660" />-->
         <input type="submit" value="Add to Cart" />
        </form>
       </div>
      </div>
      <div class="col-lg-4 col-md-6 portfolio-item filter-app">
       <img src="assets/img/portfolio/portfolio-3.jpg" class="img-fluid" alt="">
       <div class="portfolio-info">
        <h4>App 3</h4>
        $ 300
        <a href="assets/img/portfolio/portfolio-3.jpg" data-gallery="portfolioGallery"
         class="portfolio-lightbox preview-link" title="App 2"><i class="bx bx-plus"></i></a>
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx"
bx-link"></i>>/a>
        <br>
        <form action="addtocart.do" method="post">
         <input type="number" name="gty" value="1" />
         <input type="hidden" name="pid" value="3" />
         <!--<input type="hidden" name="price" value="300" />-->
         <input type="submit" value="Add to Cart" />
        </form>
       </div>
      </div>
      <div class="col-lg-4 col-md-6 portfolio-item filter-card">
       <img src="assets/img/portfolio/portfolio-4.jpg" class="img-fluid" alt="">
       <div class="portfolio-info">
        <h4>App 4</h4>
        $ 1000
        <a href="assets/img/portfolio/portfolio-4.jpg" data-gallery="portfolioGallery"
```

```
class="portfolio-lightbox preview-link" title="Card 2"><i class="bx bx-
plus"></i></a>
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx
bx-link"></i></a>
        <br>
        <form action="addtocart.do" method="post">
         <input type="number" name="qty" value="1" />
         <input type="hidden" name="pid" value="4" />
         <!--<input type="hidden" name="price" value="1000" />-->
         <input type="submit" value="Add to Cart" />
        </form>
       </div>
      </div>
      <div class="col-lg-4 col-md-6 portfolio-item filter-web">
       <img src="assets/img/portfolio/portfolio-5.jpg" class="img-fluid" alt="">
       <div class="portfolio-info">
        <h4>App 5</h4>
        $ 840
        <a href="assets/img/portfolio/portfolio-5.jpg" data-gallery="portfolioGallery"
         class="portfolio-lightbox preview-link" title="Web 2"><i class="bx bx-plus"></i></a>
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx
bx-link"></i>>
        <br>
        <form action="addtocart.do" method="post">
         <input type="number" name="qty" value="1" />
         <input type="hidden" name="pid" value="5" />
         <!--<input type="hidden" name="price" value="840" />-->
         <input type="submit" value="Add to Cart" />
        </form>
       </div>
      </div>
      <div class="col-lg-4 col-md-6 portfolio-item filter-app">
       <img src="assets/img/portfolio/portfolio-6.jpg" class="img-fluid" alt="">
       <div class="portfolio-info">
        <h4>App 6</h4>
         $710 
        <a href="assets/img/portfolio/portfolio-6.jpg" data-gallery="portfolioGallery"
         class="portfolio-lightbox preview-link" title="App 3"><i class="bx bx-plus"></i></a>
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx
bx-link"></i></a>
        <br>
        <form action="addtocart.do" method="post">
         <input type="number" name="qty" value="1" />
         <input type="hidden" name="pid" value="6" />
         <!--<input type="hidden" name="price" value="710" />-->
         <input type="submit" value="Add to Cart" />
        </form>
       </div>
      </div>
```

```
<div class="col-lg-4 col-md-6 portfolio-item filter-card">
       <img src="assets/img/portfolio/portfolio-7.jpg" class="img-fluid" alt="">
       <div class="portfolio-info">
        <h4>App 7</h4>
        $ 250
        <a href="assets/img/portfolio/portfolio-7.jpg" data-gallery="portfolioGallery"
         class="portfolio-lightbox preview-link" title="Card 1"><i class="bx bx-
plus"></i></a>
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx
bx-link"></i></a>
        <br>
        <form action="addtocart.do" method="post">
         <input type="number" name="qty" value="1" />
         <input type="hidden" name="pid" value="7" />
         <!--<input type="hidden" name="price" value="250" />-->
         <input type="submit" value="Add to Cart" />
        </form>
       </div>
      </div>
      <div class="col-lg-4 col-md-6 portfolio-item filter-card">
       <img src="assets/img/portfolio/portfolio-8.jpg" class="img-fluid" alt="">
       <div class="portfolio-info">
        <h4>App 8</h4>
        $ 72
        <a href="assets/img/portfolio/portfolio-8.jpg" data-gallery="portfolioGallery"
         class="portfolio-lightbox preview-link" title="Card 3"><i class="bx bx-
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx
bx-link"></i>>
        <hr>
        <form action="addtocart.do" method="post">
         <input type="number" name="qty" value="1" />
         <input type="hidden" name="pid" value="8" />
         <!--<input type="hidden" name="price" value="72" />-->
         <input type="submit" value="Add to Cart" />
        </form>
       </div>
      </div>
      <div class="col-lg-4 col-md-6 portfolio-item filter-web">
       <img src="assets/img/portfolio/portfolio-9.jpg" class="img-fluid" alt="">
       <div class="portfolio-info">
        <h4>App 9</h4>
        $ 350
        <a href="assets/img/portfolio/portfolio-9.jpg" data-gallery="portfolioGallery"
         class="portfolio-lightbox preview-link" title="Web 3"><i class="bx bx-plus"></i></a>
        <a href="portfolio-details.html" class="details-link" title="More Details"><i class="bx
bx-link"></i></a>
        <br>
```

```
<form action="addtocart.do" method="post">
         <input type="number" name="qty" value="1" />
         <input type="hidden" name="pid" value="9" />
         <!--<input type="hidden" name="price" value="350" />-->
         <input type="submit" value="Add to Cart" />
        </form>
      </div>
     </div>
    </div>
   </div>
  </section><!-- End Portfolio Section -->
 </main><!-- End #main -->
 <!-- ====== Footer ====== -->
 <footer id="footer">
  <div class="footer-newsletter">
   <div class="container">
    <div class="row justify-content-center">
     <div class="col-lg-6">
      <h4>Login</h4>
      <form action="elogin.do" method="post">
        <label for="username" />Username :
        <input type="text" name="username" />
        <label for="password" />Password :
        <input type="password" name="password" />
        <input type="submit" value="Login" />
      </form>
     </div>
    </div>
   </div>
  </div>
  <!-- ===== Contact Section ====== -->
  <section id="contact" class="contact">
   <div class="container" data-aos="fade-up">
    <div class="section-title">
     <h2>Contact</h2>
     <h3><span>Contact Us</span></h3>
     Ut possimus qui ut temporibus culpa velit eveniet modi omnis est adipisci expedita at
voluptas
      atque vitae autem.
    </div>
    <div class="row" data-aos="fade-up" data-aos-delay="100">
     <div class="col-lg-6">
      <div class="info-box mb-4">
       <i class="bx bx-map"></i>
        <h3>Our Address</h3>
        A108 Adam Street, New York, NY 535022
      </div>
```

```
</div>
     <div class="col-lg-3 col-md-6">
      <div class="info-box mb-4">
        <i class="bx bx-envelope"></i>
        <h3>Email Us</h3>
        contact@example.com
      </div>
     </div>
     <div class="col-lg-3 col-md-6">
      <div class="info-box mb-4">
        <i class="bx bx-phone-call"></i>
       <h3>Call Us</h3>
        +1 5589 55488 55
      </div>
     </div>
    </div>
    <div class="row" data-aos="fade-up" data-aos-delay="100">
     <div class="col-lg-6">
      <ir>frame class="mb-4 mb-lg-0"</r>
src="https://www.google.com/maps/embed?pb=!1m14!1m8!1m3!1d12097.433213460943!2d-
74.0062269!3d40.7101282!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x0%3A0xb89d1fe6bc49944
3!2sDowntown+Conference+Center!5e0!3m2!1smk!2sbg!4v1539943755621"
        frameborder="0" style="border:0; width: 100%; height: 384px;"
allowfullscreen></iframe>
     </div>
     <div class="col-lg-6">
      <form action="forms/contact.php" method="post" role="form" class="php-email-form">
        <div class="row">
         <div class="col form-group">
          <input type="text" name="name" class="form-control" id="name"</pre>
placeholder="Your Name" required>
         </div>
         <div class="col form-group">
          <input type="email" class="form-control" name="email" id="email"</pre>
placeholder="Your Email" required>
         </div>
        </div>
        <div class="form-group">
         <input type="text" class="form-control" name="subject" id="subject"</pre>
placeholder="Subject" required>
        </div>
        <div class="form-group">
         <textarea class="form-control" name="message" rows="5" placeholder="Message"
required></textarea>
        </div>
        <div class="my-3">
         <div class="loading">Loading</div>
```

```
<div class="error-message"></div>
      <div class="sent-message">Your message has been sent. Thank you!</div>
     </div>
     <div class="text-center"><button type="submit">Send Message</button></div>
    </form>
   </div>
  </div>
 </div>
</section><!-- End Contact Section -->
<div class="footer-top">
 <div class="container">
  <div class="row">
   <div class="col-lg-3 col-md-6 footer-contact">
    <h3>DM-Mart</h3>
    >
     A108 Adam Street <br>
     New York, NY 535022<br>
     United States <br><br><br></br>
     <strong>Phone:</strong> +1 5589 55488 55<br>
     <strong>Email:</strong> info@example.com<br>
    </div>
   <div class="col-lg-3 col-md-6 footer-links">
    <h4>Useful Links</h4>
    <u1>
     i class="bx bx-chevron-right"></i> <a href="#">Home</a>
     i class="bx bx-chevron-right"></i> <a href="#">About us</a>
     <i class="bx bx-chevron-right"></i> <a href="#">Services</a>
     <i class="bx bx-chevron-right"></i> <a href="#">Terms of service</a>
     <|i>i>i class="bx bx-chevron-right"></i> <a href="#">Privacy policy</a>
    </u1>
   </div>
   <div class="col-lg-3 col-md-6 footer-links">
    <h4>Our Services</h4>
    <u1>
     i class="bx bx-chevron-right"></i> <a href="#">Web Design</a>
     <|i><|i class="bx bx-chevron-right"></i> <a href="#">Web Development</a>
     <i class="bx bx-chevron-right"></i> <a href="#">Product Management</a>
     i class="bx bx-chevron-right"></i> <a href="#">Marketing</a>
     i><i class="bx bx-chevron-right"></i> <a href="#">Graphic Design</a>
    </div>
   <div class="col-lg-3 col-md-6 footer-links">
    <h4>Our Social Networks</h4>
    Cras fermentum odio eu feugiat lide par naso tierra videa magna derita valies
    <div class="social-links mt-3">
     <a href="#" class="twitter"><i class="bx bxl-twitter"></i></a>
```

```
<a href="#" class="facebook"><i class="bx bxl-facebook"></i></a>
        <a href="#" class="instagram"><i class="bx bxl-instagram"></i></a>
        <a href="#" class="google-plus"><i class="bx bxl-skype"></i></a>
        <a href="#" class="linkedin"><i class="bx bxl-linkedin"></i></a>
       </div>
     </div>
    </div>
   </div>
  </div>
  <div class="container py-4">
   <div class="copyright">
    © Copyright <strong><span>DM-Mart</span></strong>. All Rights Reserved.
   </div>
   <div class="credits">
    Designed by <a href="https://github.com/DishenMakwana">DISHEN MAKWANA</a>
   </div>
  </div>
 </footer>
 <!-- End Footer -->
 <div id="preloader"></div>
 <a href="#" class="back-to-top d-flex align-items-center justify-content-center"><i
   class="bi bi-arrow-up-short"></i></a>
 <!-- Vendor JS Files -->
 <script src="assets/vendor/aos/aos.js"></script>
 <script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
 <script src="assets/vendor/glightbox/js/glightbox.min.js"></script>
 <script src="assets/vendor/isotope-layout/isotope.pkgd.min.js"></script>
 <script src="assets/vendor/php-email-form/validate.js"></script>
 <script src="assets/vendor/purecounter/purecounter.js"></script>
 <script src="assets/vendor/swiper/swiper-bundle.min.js"></script>
 <script src="assets/vendor/waypoints/noframework.waypoints.js"></script>
 <!-- Template Main JS File -->
 <script src="assets/js/main.js"></script>
</body>
</html>
LoginForEcommerce.java:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package com.vvp.web;
import java.io.IOException;
```

```
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
* @author Dishen Makwana
public class LoginForEcommerce extends HttpServlet {
  * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
  * methods.
  * @param request servlet request
  * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
                             if an I/O error occurs
  * @throws IOException
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
       /* TODO output your page here. You may use following sample code. */
       String uName = request.getParameter("username");
       String pwd = request.getParameter("password");
       HttpSession session = request.getSession();
       if (uName.equals("admin") && pwd.equals("12345")) {
         session.setAttribute("User", "admin");
         Cookie c = new Cookie("cookie text", "admin");
         c.setMaxAge(60 * 60 * 24 * 15);
         response.addCookie(c);
         response.sendRedirect("index 1.html");
         response.sendRedirect("index 1.html");
    }
  }
  // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the
  // + sign on the left to edit the code.">
   * Handles the HTTP <code>GET</code> method.
```

```
* @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException
                             if an I/O error occurs
   */
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    processRequest(request, response);
  /**
   * Handles the HTTP <code>POST</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException
                              if an I/O error occurs
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    processRequest(request, response);
   * Returns a short description of the servlet.
   * @return a String containing servlet description
   */
  @Override
  public String getServletInfo() {
    return "Short description";
  }// </editor-fold>
Add To Cart:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package com.vvp.web;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.HashMap;
import java.util.Map;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
```

```
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
* @author Dishen Makwana
public class AddCart extends HttpServlet {
  /**
   * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
   * methods.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
       response.setContentType("text/html;charset=UTF-8");
       try (PrintWriter out = response.getWriter()) {
          /* TODO output your page here. You may use following sample code. */
          HttpSession session = request.getSession();
          int productId = Integer.parseInt(request.getParameter("pid"));
          int qty = Integer.parseInt(request.getParameter("qty"));
          // Price Store at Server side
          double priceProduct[] = {450, 660, 300, 1000, 840, 710, 250, 72, 350};
          double price = 0.0;
          for (int i = 0; i < priceProduct.length; <math>i++) {
               if ((productId - 1) == i) {
                  price = priceProduct[i];
          }
          // Cookie
          Cookie cookies[] = request.getCookies();
          Cookie userProduct = new Cookie("productid " + productId, "qty:" + qty);
          userProduct.setMaxAge(60 * 60 * 24 * 15); // 15 days
          Product product = new Product(qty, price);
          HashMap<Integer, Product> cartProducts = null;
          if (session.getAttribute("product") == null) {
               cartProducts = new HashMap<Integer, Product>();
               cartProducts.put(productId, product);
          } else {
```

```
cartProducts = (HashMap<Integer, Product>) session.getAttribute("product");
               if (cartProducts.containsKey(productId)) {
                  Product exProduct = cartProducts.get(productId);
                  exProduct.qty += qty;
                  cartProducts.replace(productId, exProduct);
               else {
                  cartProducts.put(productId, product);
          session.setAttribute("product", cartProducts);
          response.addCookie(userProduct);
          response.sendRedirect("index 1.html");
  // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the
left to edit the code.">
  /**
   * Handles the HTTP <code>GET</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
   */
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
       processRequest(request, response);
  /**
   * Handles the HTTP <code>POST</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
       processRequest(request, response);
  /**
   * Returns a short description of the servlet.
   * @return a String containing servlet description
  @Override
```

```
public String getServletInfo() {
        return "Short description";
  }// </editor-fold>
View Cart:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package com.vvp.web;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.HashMap;
import java.util.Map;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
* @author Dishen Makwana
public class ViewCart extends HttpServlet {
   * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
   * methods.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
       double grandTotal = 0;
       response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
          /* TODO output your page here. You may use following sample code. */
          HttpSession session = request.getSession();
          String User = (String) session.getAttribute("User");
```

```
HashMap<Integer, Product> cartProducts = (HashMap<Integer, Product>)
session.getAttribute("product");
   if (cartProducts == null) {
     out.println("<br>\n"
       + " <thead>\n"
       + "
              n"
       + " Your cart is empty</thad>");
 //
            out.println("Checkout
(0)
     } else {
 //
            out.println("<a href='checkout.html'>Checkout (" +
cartProducts.size() + ")</a>");
     out.println("<br><h1 align=\"center\">Hey " + User + ", Welcome to DM-Mart's
Shopping Cart</h1>");
     out.println("<br>\n"
       + "<thead>\n"
       + "
              \n''
       +"
               ProductId\n"
       + "
               Price\n"
       + "
               Ouantity\n"
       + "
               Total Price\n"
       + "
             \n"
       + " </thead>");
     for (Map.Entry<Integer, Product> entry : cartProducts.entrySet()) {
       int key = entry.getKey();
       Product p = entry.getValue();
       out.println("\n"
         + "
               ");
       out.println("<td>" + key + "</td>");
       out.println("" + p.price + "");
       out.println("" + p.qty + "");
       out.println("" + (p.price * p.qty) + "");
       grandTotal += (p.price * p.qty);
     out.println("Grand Total " +
grandTotal + "\n"
 }
 // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the
 // + sign on the left to edit the code.">
  * Handles the HTTP <code>GET</code> method.
  * @param request servlet request
  * @param response servlet response
  * @throws ServletException if a servlet-specific error occurs
```

```
* @throws IOException
                              if an I/O error occurs
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    processRequest(request, response);
  /**
   * Handles the HTTP <code>POST</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException
                              if an I/O error occurs
   */
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    processRequest(request, response);
   * Returns a short description of the servlet.
   * @return a String containing servlet description
  @Override
  public String getServletInfo() {
    return "Short description";
  }// </editor-fold>
Product Class:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package com.vvp.web;
/**
* @author Dishen Makwana
public class Product {
  int qty;
  double price;
```

```
return qty;
  public void setQty(int qty) {
       this.qty = qty;
  public double getPrice() {
       return price;
  public void setPrice(double price) {
       this.price = price;
  public Product(int qty, double price) {
       this.qty = qty;
       this.price = price;
}
Checkout.html:
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="utf-8">
 <meta content="width=device-width, initial-scale=1.0" name="viewport">
<title>Ecommerce</title>
</head>
<body>
 <!-- ===== Header ===== -->
 <header id="header" class="d-flex align-items-center">
  <div class="container d-flex align-items-center justify-content-between">
   <h1 class="logo"><a href="index 1.html">DM-Mart</a></h1>
   <!-- Uncomment below if you prefer to use an image logo -->
   <a href="index 1.html" class="logo"><img src="assets/img/logo.png" alt=""></a>
   <nav id="navbar" class="navbar">
    <u1>
     <a class="nav-link scrollto active" href="index 1.html">Home</a>
     <a class="nav-link scrollto" href="#portfolio">Portfolio</a>
     <a class="nav-link scrollto" href="#footer">Contact</a>
     <a class="nav-link scrollto" href="viewcart.do">View Cart</a>
```

public int getQty() {

```
<i class="bi bi-list mobile-nav-toggle"></i>
  </nav><!-- .navbar -->
 </div>
</header><!-- End Header -->
<main id="main">
 <div class="container-fluid">
  <div class="container">
   <div class="formBox">
    <form method="post" action="checkout.do">
     <div class="row">
       <div class="col-sm-12">
       <h1>Contact form</h1>
      </div>
     </div>
     <div class="row">
       <div class="col-sm-6">
        <div class="inputBox ">
         <div class="inputText">Your Name</div>
         <input type="text" name="party name" class="input">
       </div>
     </div>
     <div class="row">
       <div class="col-sm-6">
       <div class="inputBox">
         <div class="inputText">Email</div>
         <input type="text" name="email" class="input">
        </div>
       </div>
     </div>
     <div class="row">
       <div class="col-sm-6">
       <div class="inputBox">
         <div class="inputText">Mobile</div>
         <input type="text" name="contect no" class="input">
        </div>
       </div>
     </div>
     <div class="row">
       <div class="col-sm-6">
        <div class="inputBox">
         <div class="inputText">Address</div>
         <input type="text" name="Shipping address" class="input">
       </div>
```

```
</div>
        <div class="col-sm-6">
         <div class="inputBox">
          <input type="radio" name="COD" value="COD" />
          Cash on Delivery
         </div>
        </div>
       </div>
       <div class="row">
        <div class="col-sm-12">
         <input type="submit" name="Submit" class="button" value="Checkout">
        </div>
       </div>
     </form>
    </div>
   </div>
  </div>
 </main><!-- End #main -->
</body>
</html>
Checkout.java:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package com.vvp.web;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
* @author Dishen Makwana
public class Checkout extends HttpServlet {
   * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
   * methods.
```

```
* @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
       /* TODO output your page here. You may use following sample code. */
       HttpSession session = request.getSession();
       String name = request.getParameter("party name");
       String contact no = request.getParameter("contect no");
       String address = request.getParameter("Shipping address");
       String paymentMethod = request.getParameter("COD");
       out.println(name+"</br>");
       out.println(contact no+"</br>");
       out.println(address+"</br>");
       out.println(paymentMethod+"</br>");
       session.removeAttribute("product");
  // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the
left to edit the code.">
  /**
   * Handles the HTTP <code>GET</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
   */
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    processRequest(request, response);
   * Handles the HTTP <code>POST</code> method.
   * @param request servlet request
   * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
   * @throws IOException if an I/O error occurs
```

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="3.1" xmlns="http://xmlns.jcp.org/xml/ns/javaee"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app 3 1.xsd">
 <servlet>
  <servlet-name>HelloWorld</servlet-name>
  <servlet-class>com.vvp.web.HelloWorld</servlet-class>
 </servlet>
 <servlet>
  <servlet-name>TableController</servlet-name>
  <servlet-class>com.vvp.web.TableController/servlet-class>
 </servlet>
 <servlet>
  <servlet-name>LoginController</servlet-name>
  <servlet-class>com.vvp.web.LoginController/servlet-class>
 </servlet>
 <servlet>
  <servlet-name>ViewCart</servlet-name>
  <servlet-class>com.vvp.web.ViewCart</servlet-class>
 </servlet>
```

```
<servlet>
 <servlet-name>Checkout</servlet-name>
 <servlet-class>com.vvp.web.Checkout</servlet-class>
</servlet>
<servlet>
 <servlet-name>AddCart/servlet-name>
 <servlet-class>com.vvp.web.AddCart</servlet-class>
</servlet>
<servlet>
 <servlet-name>Visitor/servlet-name>
 <servlet-class>com.vvp.web.Visitor/servlet-class>
</servlet>
<servlet>
 <servlet-name>LoginForEcommerce</servlet-name>
 <servlet-class>com.vvp.web.LoginForEcommerce</servlet-class>
</servlet>
<servlet-mapping>
 <servlet-name>HelloWorld</servlet-name>
 <url>pattern>/helloworld.do</url-pattern></url
</servlet-mapping>
<servlet-mapping>
 <servlet-name>TableController/servlet-name>
 <url-pattern>/tablecontroller.do</url-pattern>
</servlet-mapping>
<servlet-mapping>
 <servlet-name>LoginController</servlet-name>
 <url-pattern>/login.do</url-pattern>
</servlet-mapping>
<servlet-mapping>
 <servlet-name>ViewCart/servlet-name>
 <url>pattern>/viewcart.do</url-pattern></url-pattern>
</servlet-mapping>
<servlet-mapping>
 <servlet-name>Checkout</servlet-name>
 <url-pattern>/checkout.do</url-pattern>
```

```
</servlet-mapping>
 <servlet-mapping>
  <servlet-name>AddCart</servlet-name>
  <url>pattern>/addtocart.do</url-pattern></url-pattern>
 </servlet-mapping>
 <servlet-mapping>
  <servlet-name>Visitor
  <url-pattern>/visitor.do</url-pattern>
 </servlet-mapping>
 <servlet-mapping>
  <servlet-name>LoginForEcommerce</servlet-name>
  <url>pattern>/elogin.do</url-pattern></url-
 </servlet-mapping>
 <session-config>
  <session-timeout>
   30
  </session-timeout>
</session-config>
</web-app>
```

# **Assignment-4**

## 1. Design JSP page for user signup.

```
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.Statement"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@include file="ecomHeader.jsp" %>
<title>Signup Page</title>
<link rel="stylesheet" href="css/loginstyle.css" />
</head>
<%
  Statement st = null;
  ResultSet rs = null:
  PreparedStatement prst = null;
%>
<%@include file="connectionDB.jsp" %>
<body>
  <!-- ===== Header ===== -->
  <header id="header" class="d-flex align-items-center">
    <div class="container d-flex align-items-center justify-content-between">
      <h1 class="logo"><a href="ecomDB.jsp">DM-Mart</a></h1>
      <!-- Uncomment below if you prefer to use an image logo -->
      <a href="ecomDB.jsp" class="logo">
       <img src="assets/img/logo.png" alt=""/></a>
      <nav id="navbar" class="navbar">
         <u1>
           <a class="nav-link scrollto" href="ecomDB.jsp">Home</a>
           <a class="nav-link scrollto" href="viewcartDB.jsp">View Cart</a>
           <a class="nav-link scrollto" href="eloginDB.jsp">Login</a>
           <a class="nav-link scrollto active" href="esignupDB.jsp">Sign Up</a>
         <i class="bi bi-list mobile-nav-toggle"></i>
```

```
</nav>
    <!-- navbar -->
  </div>
</header>
<!-- End Header -->
<main id="main">
  <div class="content">
    <div class="container">
       <div class="row">
         <div class="col-md-6 order-md-2">
           <img src="./img/undraw file sync ot38.svg" alt="Image" class="img-fluid" />
         </div>
         <div class="col-md-6 contents">
           <div class="row justify-content-center">
              <div class="col-md-8">
                <div class="mb-4">
                   <h3>Sign In to <strong>DM Mart</strong></h3>
                  <p class="mb-4">
                </div>
                <form action="" method="post">
                   <div class="form-group first">
                     <label for="username">Username</label>
                     <input type="text" name="username" class="form-control"</pre>
                       id="username" />
                   </div>
                   <div class="form-group first">
                     <label for="email">Email</label>
                     <input type="text" name="email" class="form-control"</pre>
                       id="email" />
                   </div>
                   <div class="form-group last mb-4">
                     <label for="password1">Password</label>
                     <input type="password" name="password1" class="form-control"</pre>
                       id="password1" />
                   </div>
```

```
<label for="password">Confirm Password</label>
                     <input type="password" name="password2" class="form-control"</pre>
                       id="password2" />
                  </div>
                  <div class="d-flex mb-5 align-items-center">
                     <label class="control control--checkbox mb-0">
                       <span class="caption">Remember me</span>
                       <input type="checkbox" checked="checked" />
                       <div class="control indicator"></div>
                     </label>
                     <span class="ml-auto">
                      <a href="#" class="forgot-pass">Forgot Password</a></span>
                  </div>
                  <input type="submit" value="Sign Up"
                     class="btn text-white btn-block btn-primary" />
                  <span class="d-block text-left my-4 text-muted">
                     or sign in with</span>
                  <div class="social-login">
                     <a href="#" class="facebook">
                       <span class="icon-facebook mr-3"></span></a>
                     <a href="#" class="twitter">
                       <span class="icon-twitter mr-3"></span></a>
                     <a href="#" class="google">
                       <span class="icon-google mr-3"></span></a>
                  </div>
                </form>
              </div>
           </div>
         </div>
      </div>
    </div>
  </div>
</main>
```

<div class="form-group last mb-4">

```
<%
    if (request.getParameter("username") != null) {
       if (request.getParameter("username") != null && request.getParameter("email") != null
&& request.getParameter("password1") != null && request.getParameter("password2") != null)
         String userName = (String) request.getParameter("username");
         String email = (String) request.getParameter("email");
         String passWord1 = (String) request.getParameter("password1");
         String passWord2 = (String) request.getParameter("password2");
         boolean isUserExist = false;
         if (passWord1.equals(passWord2)) {
            String loginQry = "SELECT username, password FROM user where username=?";
           prst = connection.prepareStatement(loginQry);
           prst.setString(1, userName);
           rs = prst.executeQuery();
           if (rs.next()) {
              isUserExist = true;
           if (!isUserExist) {
              String signupQry = "INSERT INTO 'user' VALUES (NULL,?,?,?,?);";
              prst = connection.prepareStatement(signupQry);
              prst.setString(1, userName);
              prst.setString(2, passWord1);
              prst.setString(3, email);
              prst.setString(4, "user");
              prst.executeUpdate();
            }
         if (isUserExist) {
           response.sendRedirect("eloginDB.jsp");
         } else {
```

```
response.sendRedirect("esignupDB.jsp");
} else {
    response.sendRedirect("esignupDB.jsp");
}
%>
<!-- End #main -->
<%@include file="ecomFooter.jsp" %>
```

#### 2. Dynamic Login Controller using JDBC.

```
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.Statement"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@include file="ecomHeader.jsp" %>
<title>Login Page</title>
<link rel="stylesheet" href="css/loginstyle.css" />
</head>
<%
  Statement st = null;
  ResultSet rs = null;
  PreparedStatement prst = null;
%>
<%@include file="connectionDB.jsp" %>
<body>
  <!-- ===== Header ===== -->
  <header id="header" class="d-flex align-items-center">
    <div class="container d-flex align-items-center justify-content-between">
      <h1 class="logo"><a href="ecomDB.jsp">DM-Mart</a></h1>
       <!-- Uncomment below if you prefer to use an image logo -->
      <a href="ecomDB.jsp" class="logo"><img src="assets/img/logo.png" alt=""/></a>
```

```
<nav id="navbar" class="navbar">
      <u1>
        <a class="nav-link scrollto" href="ecomDB.jsp">Home</a>
        <a class="nav-link scrollto" href="viewcartDB.jsp">View Cart</a>
        <a class="nav-link scrollto active" href="eloginDB.jsp">Login</a>
        <a class="nav-link scrollto" href="esignupDB.jsp">Sign Up</a>
      <i class="bi bi-list mobile-nav-toggle"></i>
    </nav>
    <!-- navbar -->
  </div>
</header>
<!-- End Header -->
<main id="main">
  <div class="content">
    <div class="container">
      <div class="row">
        <div class="col-md-6 order-md-2">
           <img src="./img/undraw file sync ot38.svg" alt="Image" class="img-fluid"/>
        </div>
        <div class="col-md-6 contents">
           <div class="row justify-content-center">
             <div class="col-md-8">
               <div class="mb-4">
                 <h3>Sign In to <strong>DM Mart</strong></h3>
                 </div>
               <form action="" method="post">
                 <div class="form-group first">
                    <label for="username">Username</label>
                    <input type="text" name="username" class="form-control"</pre>
                      id="username"/>
                 </div>
                 <div class="form-group last mb-4">
                    <label for="password">Password</label>
```

```
id="password" />
                   </div>
                   <div class="d-flex mb-5 align-items-center">
                     <label class="control control--checkbox mb-0">
                      <span class="caption">Remember me</span>
                       <input type="checkbox" checked="checked" />
                       <div class="control indicator"></div>
                     </label>
                     <span class="ml-auto"><a href="#" class="forgot-pass">
                       Forgot Password</a></span>
                   </div>
                   <input type="submit" value="Log In"</pre>
                     class="btn text-white btn-block btn-primary"/>
                   <span class="d-block text-left my-4 text-muted">
                     or sign in with</span>
                   <div class="social-login">
                     <a href="#" class="facebook">
                       <span class="icon-facebook mr-3"></span></a>
                     <a href="#" class="twitter">
                       <span class="icon-twitter mr-3"></span></a>
                     <a href="#" class="google">
                       <span class="icon-google mr-3"></span></a>
                   </div>
                </form>
              </div>
           </div>
         </div>
       </div>
    </div>
  </div>
</main>
<%
  if (request.getParameter("username") != null) {
```

<input type="password" name="password" class="form-control"</pre>

```
if (request.getParameter("username") != null && request.getParameter("password") !=
null) {
         String userName = (String) request.getParameter("username");
         String passWord = (String) request.getParameter("password");
         String loginQry = "SELECT * FROM user where username=? and password=?";
         prst = connection.prepareStatement(loginQry);
         prst.setString(1, userName);
         prst.setString(2, passWord);
         rs = prst.executeQuery();
         while (rs.next()) {
            String name = rs.getString("username");
           int userId = rs.getInt("userid");
            String password = rs.getString("password");
            if (name.equals(userName) && password.equals(passWord)) {
              Cookie c = new Cookie("user name", userName);
              c.setMaxAge(60 * 60 * 24 * 15);
              Cookie cpw = new Cookie("password", passWord);
              cpw.setMaxAge(60 * 60 * 24 * 15);
              response.addCookie(cpw);
              response.addCookie(c);
              session.setAttribute("User", userName);
              session.setAttribute("UserId", userId);
              response.sendRedirect("ecomDB.jsp");
            } else {
              response.sendRedirect("eloginDB.jsp");
       } else {
         response.sendRedirect("eloginDB.jsp");
```

```
}
%>
<!-- End #main -->
<%@include file="ecomFooter.jsp" %>
```

3. Implement eCommerce AdminPanel to perform Insert, Update, Delete and Search on product table pid,pname,stock,price,image.

## adminProducts.jsp

```
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.Statement"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@include file="ecomHeader.jsp" %>
<title>Admin Products Page</title>
<link rel="stylesheet" href="css/viewcart.css">
<style>
  .searchitm {
    margin-top: 100px;
    margin-bottom: 100px;
    width:100%;
    position: absolute;
    padding: 0px 300px;
  }
</style>
</head>
<%
  Statement st = null;
  ResultSet rs = null;
  PreparedStatement prst = null;
%>
<%@include file="connectionDB.jsp" %>
```

```
<body>
  <!-- ===== Header ===== -->
  <header id="header" class="d-flex align-items-center">
    <div class="container d-flex align-items-center justify-content-between">
      <h1 class="logo"><a href="ecomDB.jsp">DM-Mart</a></h1>
      <!-- Uncomment below if you prefer to use an image logo -->
      <a href="ecomDB.jsp" class="logo"><img src="assets/img/logo.png" alt=""></a>
      <nav id="navbar" class="navbar">
         <u1>
           <a class="nav-link scrollto active" href="adminProducts.jsp">Admin</a>
Product</a>
           <a class="nav-link scrollto" href="addProducts.jsp">Add Product</a>
           <a class="nav-link scrollto" href="eloginDB.jsp">Login</a>
           <a class="nav-link scrollto" href="elogoutDB.jsp">Logout</a>
         <i class="bi bi-list mobile-nav-toggle"></i>
      </nav><!-- navbar -->
    </div>
  </header><!-- End Header -->
  <main id="main">
    <div class="searchitm">
      <form method="post" action="">
         Search By : <select name="searchby">
           <option value="pid">Product Id</option>
           <option value="pname">Product Name
           <option value="stock">Stock Items</option>
           <option value="price">Price</option>
         </select>&nbsp;
         <select name="searchopt">
           <option value=">">></option>
           <option value="=">=</option>
           <option value="<"><</option>
           <option value="LIKE">LIKE</option>
         </select>&nbsp;
         <input type="text" name="searchproduct" placeholder="Search item..">&nbsp;
```

```
<input class="btn btn-success" type="submit" name="searchbtn" value="Search">
   <input class="btn btn-dark" type="submit" name="clearbtn" value="clear">
  </form>
  <br>
</div>
<div class="table-content">
  <thead>
      Product Id
        Product Name
        Product Stock
        Product Image
        Product Price
        </thead>
    <%
      String where = "1=1";
     String searchbtn = request.getParameter("searchbtn");
      String clearbtn = request.getParameter("clearbtn");
     if (clearbtn != null) {
        where = "1=1";
      }
      if (searchbtn != null) {
        String searchby = (String) request.getParameter("searchby");
        String searchopt = (String) request.getParameter("searchopt");
        String val = (String) request.getParameter("searchproduct");
        if (searchopt.equals("LIKE")) {
         val = " '%" + val + "%' ";
        }
        where = searchby + " " + " " + searchopt + " " + val;
```

```
st = connection.createStatement();
                                 rs = st.executeQuery("SELECT * FROM product master WHERE " + where);
                                 while (rs.next()) {
                                        int pid = rs.getInt("pid");
                                        String pname = rs.getString("pname");
                                        int stock = rs.getInt("stock");
                                        String image = rs.getString("image");
                                        double price = rs.getDouble("price");
                          %>
                           <\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\ful><\
                                        <img src="<%=image%>" class="img-fluid" alt="<%=pname%>"
style="width:210px; height: 260px">
                                        <\fuelerance \% > <
                                        <form action="adminChanges.jsp" method="get">
                                                      <input type="hidden" name="pid" value="<%=pid%>" />
                                                      <input type="hidden" name="query" value="update" />
                                                      <input class="btn btn-dark" type="submit" value="Update" />
                                               </form>
                                        <form action="" method="POST">
                                                      <input type="hidden" name="pid" value="<%=pid%>"/>
                                                      <input type="hidden" name="query" value="delete" />
                                                      <input class="btn btn-danger" type="submit" value="Delete" />
                                               </form>
                                        <% } %>
```

```
</div>
  </main><!-- End #main -->
  <%
    if (request.getParameter("query") != null) {
      if (request.getParameter("query").equals("delete")) {
         int productId = Integer.parseInt(request.getParameter("pid"));
         String deleteQry = "DELETE FROM product master WHERE 'pid'=?";
         prst = connection.prepareStatement(deleteQry);
         prst.setInt(1, productId);
         int row = prst.executeUpdate();
         response.sendRedirect("adminProducts.jsp");
  %>
  <%@include file="ecomFooter.jsp" %>
adminChanges.jsp
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.Statement"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@include file="ecomHeader.jsp" %>
<title>Admin Update Products Page</title>
<link rel="stylesheet" href="css/checkout.css" />
</head>
<%
  Statement st = null;
  ResultSet rs = null;
  PreparedStatement prst = null;
%>
<%@include file="connectionDB.jsp" %>
```

```
<body>
  <!-- ===== Header ===== -->
  <header id="header" class="d-flex align-items-center">
    <div class="container d-flex align-items-center justify-content-between">
      <h1 class="logo"><a href="ecomDB.jsp">DM-Mart</a></h1>
      <!-- Uncomment below if you prefer to use an image logo -->
      <a href="ecomDB.jsp" class="logo"
        ><img src="assets/img/logo.png" alt=""/></a>
      <nav id="navbar" class="navbar">
         <u1>
           <a class="nav-link scrollto" href="ecomDB.jsp">Home</a>
           <a class="nav-link scrollto active" href="addProducts.jsp">Admin</a>
Page</a>
           <a class="nav-link scrollto" href="adminProducts.jsp">Admin</a>
Product</a>
           <a class="nav-link scrollto" href="eloginDB.jsp">Login</a>
           <a class="nav-link scrollto" href="elogoutDB.jsp">Logout</a>
         <i class="bi bi-list mobile-nav-toggle"></i>
      </nav>
      <!-- .navbar -->
    </div>
  </header>
  <!-- End Header -->
  <main id="main">
    <div class="container-fluid">
      <div class="container">
         <div class="formBox">
           <form method="post" action="">
             <div class="row">
               <div class="col-sm-12">
                  <h1>Product Details</h1>
               </div>
```

```
</div>
<%
  int productId = Integer.parseInt(request.getParameter("pid"));
  String query = (String) request.getParameter("query");
  String fetchQry = "SELECT * FROM product master WHERE pid=?";
  prst = connection.prepareStatement(fetchQry);
  prst.setInt(1, productId);
  rs = prst.executeQuery();
  while (rs.next()) {
    int pid = rs.getInt("pid");
    String pname = rs.getString("pname");
    int stock = rs.getInt("stock");
    String image = rs.getString("image");
    double price = rs.getDouble("price");
%>
<div class="row">
  <div class="col-sm-6">
    <div class="inputBox">
       <!--<div class="inputText">Product Name</div>-->
       <label for="pname" >Product Name</label>
      <input type="text" name="pname" class="input" value="<%=pname%>"/>
    </div>
  </div>
</div>
<div class="row">
  <div class="col-sm-6">
    <div class="inputBox">
       <!--<div class="inputText">Product Stock</div>-->
       <label for="stock" >Product Stock</label>
     <input type="number" name="stock" class="input" value="<%=stock%>"/>
    </div>
  </div>
</div>
<div class="row">
```

```
<div class="inputBox">
                     <!--<div class="inputText">Product Image</div>-->
                     <label for="image" >Product Image Path</label>
                    <input type="text" name="image" class="input" value="<%=image%>" />
                  </div>
                </div>
              </div>
              <div class="row">
                <div class="col-sm-6">
                  <div class="inputBox">
                     <!--<div class="inputText">Product Price</div>-->
                     <label for="price" >Product Price</label>
                   <input type="number" name="price" class="input" value="<%=price%>" />
                  </div>
                </div>
              </div>
              <div class="row">
                <div class="col-sm-12">
                  <input type="submit" name="Submit" class="button"
                     value="Update Product" />
                </div>
              </div>
              <% } %>
           </form>
         </div>
       </div>
    </div>
  </main>
  <!-- End #main -->
  <%
    if (request.getParameter("pname") != null && request.getParameter("stock") != null &&
request.getParameter("image") != null && request.getParameter("price") != null) {
       String pname = request.getParameter("pname");
```

<div class="col-sm-6">

```
int stock = Integer.parseInt(request.getParameter("stock"));
       String image = request.getParameter("image");
       double price = Double.parseDouble(request.getParameter("price"));
       String updateQry = "UPDATE 'product master' SET 'pname'=?, 'stock'=?, 'image'=?,
'price'=? WHERE pid=?";
       prst = connection.prepareStatement(updateQry);
       prst.setString(1, pname);
       prst.setInt(2, stock);
       prst.setString(3, image);
       prst.setDouble(4, price);
       prst.setInt(5, productId);
       int row = st.executeUpdate(updateQry);
       response.sendRedirect("adminProducts.jsp");
  %>
addProducts.jsp
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.Statement"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@include file="ecomHeader.jsp" %>
<title>Admin Add Products Page</title>
<link rel="stylesheet" href="css/checkout.css" />
</head>
< \frac{0}{0}
  Statement st = null;
  ResultSet rs = null;
  PreparedStatement prst = null;
%>
<%@include file="connectionDB.jsp" %>
<body>
```

```
<!-- ===== Header ===== -->
  <header id="header" class="d-flex align-items-center">
    <div class="container d-flex align-items-center justify-content-between">
      <h1 class="logo"><a href="ecomDB.jsp">DM-Mart</a></h1>
      <!-- Uncomment below if you prefer to use an image logo -->
      <a href="ecomDB.jsp" class="logo"
        ><img src="assets/img/logo.png" alt=""/></a>
      <nav id="navbar" class="navbar">
        <111>
           <a class="nav-link scrollto" href="ecomDB.jsp">Home</a>
           <a class="nav-link scrollto active" href="addProducts.jsp">Admin</a>
Page</a>
           <a class="nav-link scrollto" href="adminProducts.jsp">Admin</a>
Product</a>
           <a class="nav-link scrollto" href="eloginDB.jsp">Login</a>
           <a class="nav-link scrollto" href="elogoutDB.jsp">Logout</a>
        <i class="bi bi-list mobile-nav-toggle"></i>
      </nav>
      <!-- .navbar -->
    </div>
  </header>
  <!-- End Header -->
  <main id="main">
    <div class="container-fluid">
      <div class="container">
         <div class="formBox">
           <form method="post" action="">
             <div class="row">
               <div class="col-sm-12">
                  <h1>Product Details</h1>
               </div>
             </div>
             <div class="row">
               <div class="col-sm-6">
```

```
<div class="inputBox">
       <div class="inputText">Product Name</div>
       <input type="text" name="pname" class="input" />
    </div>
  </div>
</div>
<div class="row">
  <div class="col-sm-6">
    <div class="inputBox">
       <div class="inputText">Product Stock</div>
       <input type="number" name="stock" class="input" />
    </div>
  </div>
</div>
<div class="row">
  <div class="col-sm-6">
    <div class="inputBox">
       <div class="inputText">Product Image</div>
       <input type="text" name="image" class="input" />
    </div>
  </div>
</div>
<div class="row">
  <div class="col-sm-6">
    <div class="inputBox">
       <div class="inputText">Product Price</div>
       <input type="number" name="price" class="input" />
    </div>
  </div>
</div>
<div class="row">
  <div class="col-sm-12">
    <input type="submit" name="Submit" class="button"
       value="Add Product" />
  </div>
```

```
</div>
            </form>
         </div>
       </div>
    </div>
  </main>
  <!-- End #main -->
  <%
    if (request.getParameter("pname") != null && request.getParameter("stock") != null &&
request.getParameter("image") != null && request.getParameter("price") != null) {
       String pname = request.getParameter("pname");
       int stock = Integer.parseInt(request.getParameter("stock"));
       String image = request.getParameter("image");
       double price = Double.parseDouble(request.getParameter("price"));
       String addQry = "INSERT INTO 'product master' ('pid', 'pname', 'stock', 'image',
'price') VALUES (NULL, ?, ?, ?, ?) ";
       prst = connection.prepareStatement(addQry);
       prst.setString(1, pname);
       prst.setInt(2, stock);
       prst.setString(3, image);
       prst.setDouble(4, price);
       int row = prst.executeUpdate();
       response.sendRedirect("addProducts.jsp");
    }
  %>
  <%@include file="ecomFooter.jsp" %>
```

## **Assignment-5**

1. Implement Insert, Update, Delete Search using Hibernate on product table(pid,pname,stock,price,image).

```
<%@page import="java.util.Iterator"%>
<%@page import="org.hibernate.Query"%>
<%@page import="com.vvp.web.ProductMaster"%>
<%@page import="org.hibernate.Transaction"%>
<%@page import="com.vvp.web.HUtil"%>
<%@page import="org.hibernate.Session" %>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@include file="ecomHeader.jsp" %>
<title>Admin Products Page</title>
<link rel="stylesheet" href="css/viewcart.css">
<style>
  .searchitm {
    margin-top: 100px;
    margin-bottom: 100px;
    width:100%;
    position: absolute;
    padding: 0px 300px;
  }
</style>
</head>
<body>
  <!-- ===== Header ===== -->
  <header id="header" class="d-flex align-items-center">
    <div class="container d-flex align-items-center justify-content-between">
      <h1 class="logo"><a href="ecomDB.jsp">DM-Mart</a></h1>
      <!-- Uncomment below if you prefer to use an image logo -->
      <a href="ecomDB.jsp" class="logo"><img src="assets/img/logo.png" alt=""></a>
      <nav id="navbar" class="navbar">
```

```
<a class="nav-link scrollto active" href="adminProducts.jsp">Admin</a>
Product</a>
          <a class="nav-link scrollto" href="addProducts.jsp">Add Product</a>
          <a class="nav-link scrollto" href="eloginDB.jsp">Login</a>
          <a class="nav-link scrollto" href="elogoutDB.jsp">Logout</a>
        <i class="bi bi-list mobile-nav-toggle"></i>
      </nav><!-- navbar -->
    </div>
  </header><!-- End Header -->
  <main id="main">
    <div class="searchitm">
      <form method="post" action="">
        Search By:   <select name="searchby">
          <option value="pid">Product Id</option>
          <option value="pname">Product Name
          <option value="stock">Stock Items</option>
          <option value="price">Price</option>
        </select>&nbsp;
        <select name="searchopt">
          <option value=">">></option>
          <option value="=">=</option>
          <option value="<"><</option>
          <option value="LIKE">LIKE</option>
        </select>&nbsp;
        <input type="text" name="searchproduct" placeholder="Search item..">&nbsp;
        <input class="btn btn-success" type="submit" name="searchbtn" value="Search">
        <input class="btn btn-dark" type="submit" name="clearbtn" value="clear">
      </form>
      <br>
    </div>
    <div class="table-content">
      <thead>
```

```
Product Id
             Product Name
             Product Stock
             Product Image
             Product Price
             <th></th>
           </thead>
         <%
           String searchbtn = request.getParameter("searchbtn");
           String clearbtn = request.getParameter("clearbtn");
           Session hSession = HUtil.getSessionFactory().openSession();
           Transaction tx = hSession.beginTransaction();
           Query q = hSession.createQuery("from ProductMaster pm");
           String searchby = (String) request.getParameter("searchby");
           String searchopt = (String) request.getParameter("searchopt");
           String val = (String) request.getParameter("searchproduct");
           if (searchbtn != null) {
             q = hSession.createQuery("from ProductMaster pm where pm." + searchby + " "
+ " " + searchopt + " " + val);
           if (clearbtn != null) {
             q = hSession.createQuery("from ProductMaster pm");
           Iterator it = q.list().iterator();
           while (it.hasNext()) {
             ProductMaster databaseProduct = (ProductMaster) it.next();
             int pid = databaseProduct.getPid();
             String pname = databaseProduct.getPname();
             int stock = databaseProduct.getStock();
```

```
String image = databaseProduct.getImage();
            double price = databaseProduct.getPrice();
        %>
        <\td><\fullettd>
            <\td><\td>
            <%=stock%>
            <img src="<%=image%>" class="img-fluid" alt="<%=pname%>"
style="width:210px; height: 260px">
            <\fuller
            <form action="adminChanges.jsp" method="get">
                <input type="hidden" name="pid" value="<%=pid%>" />
                <input type="hidden" name="query" value="update" />
                <input class="btn btn-dark" type="submit" value="Update" />
              </form>
            <form action="" method="POST">
                <input type="hidden" name="pid" value="<%=pid%>" />
                <input type="hidden" name="query" value="delete" />
                <input class="btn btn-danger" type="submit" value="Delete" />
              </form>
            <% } %>
      </div>
  </main><!-- End #main -->
  <%
    if (request.getParameter("query") != null) {
      if (request.getParameter("query").equals("delete")) {
        int productId = Integer.parseInt(request.getParameter("pid"));
```

```
ProductMaster pm = (ProductMaster)hSession.get(ProductMaster.class, productId);
hSession.delete(pm);
response.sendRedirect("adminProducts.jsp");
}
%>
<%@include file="ecomFooter.jsp" %>
```