**week-1:**

import java.awt.\*;

import javax.swing.\*;

import java.awt.event.\*;

public class LockApp extends JFrame

{

JButton btnen,btncl;

JButton[] btn;

JPanel pg,pb;

JTextField tg;

int i;

String msg="",nums="",pin="12345";

public LockApp()

{

pg=new JPanel(new FlowLayout());

tg=new JTextField(30);

pg.add(tg);

btn=new JButton[10];

pb=new JPanel(new GridLayout(4,3));

for(i=1;i<=9;i++)

{

btn[i]=new JButton(Integer.toString(i));

pb.add(btn[i]);

}

btncl=new JButton("Clear");

pb.add(btncl);

btn[0]=new JButton(Integer.toString(0));

pb.add(btn[0]);

btnen=new JButton("Enter");

pb.add(btnen);

for(i=0;i<=9;i++)

{

btn[i].addActionListener(new btn1list());

}

btncl.addActionListener(new btn2list());

btnen.addActionListener(new btn2list());

setLayout(new BorderLayout());

add(pg,BorderLayout.NORTH);

add(pb,BorderLayout.CENTER);

setSize(300,300);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setVisible(true);

}

public static void main(String args[])

{

new LockApp();

}

private class btn1list implements ActionListener

{

public void actionPerformed(ActionEvent evt)

{

nums+=evt.getActionCommand();

msg+="\*";

tg.setText(msg);

}

}

private class btn2list implements ActionListener

{

public void actionPerformed(ActionEvent evt)

{

if(evt.getSource()==btncl)

{

tg.setText("CLOSE");

msg="";

nums="";

}

else

{

if(nums.equals(pin))

{

tg.setText("OPEN");

}

else

{

tg.setText("WRONG PIN");

}

}

}

}

}

------------------------------------------------------

**week-2:**

import java.sql.\*;

import java.util.\*;

public class emp {

public static void main(String[] args)

{

try

{

Class.forName("oracle.jdbc.driver.OracleDriver");

Connection con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","Akshitha","Akshitha");

Statement stmt=con.createStatement();

stmt.executeUpdate("INSERT INTO e1 values(23,'john',10000,'CSE')");

ResultSet rs=stmt.executeQuery("select \* from e1");

while(rs.next())

{

System.out.println("\t"+rs.getInt(1)+"\t"+rs.getString(2)+"\t"+rs.getInt(3)+"\t"+rs.getString(4));

}

stmt.close();

con.close();

}

catch(ClassNotFoundException e)

{

System.out.println("Exception:"+"oracle driver not available"+e.getMessage());

}

catch(SQLException e)

{

System.out.println("Exception:"+"improper syntax in statement"+e.getMessage());

}

}

}

-----------------------------------------------------------------

**week-3:**

1.

**Arithmetic.java:**

interface Arithmetic {

int operation(int a, int b);

}

**Arth.java:**

import java.util.Random;

public class Arth {

public static void main(String[] args) {

int die1; // The number on the first die.

int die2; // The number on the second die.

die1=1+(int)(Math.random()\*6) ;

die2=1+(int)(Math.random()\*6) ;

// Addition using Lambda expression

Arithmetic addition = (int a, int b) -> (a + b);

System.out.println("the first die roll value"+die1);

System.out.println("the second die roll value"+die2);

System.out.println("sum of two dice roll is = " + addition.operation(die1, die2));

}

}

(OR)

import java.util.\*;

import java.util.function.Supplier;

import java.lang.\*;

public class RollDice {

public static void main(String args[])

{

Supplier<Integer> die1=()->{

Random r=new Random();

return (int)(Math.random()\*6)+1;

};

int x=(int)die1.get();

int y=(int)die1.get();

System.out.println("first"+x);

System.out.println("second"+y);

System.out.println(x+y);

}

}

2.

import java.util.\*;

public class lambda {

public static void main(String args[])

{

ArrayList<Integer> a=new ArrayList<Integer>();

ArrayList<Integer> b=new ArrayList<Integer>();

a.add(1);

a.add(2);

a.add(3);

a.add(4);

a.forEach((n)->{

if((n%2)!=0)

{

System.out.println(n);

b.add(n);

}

});

b.forEach((n)->{

System.out.println(n\*n\*n);

});

}

}

--------------------------------------

**week-4:**

1.

import java.util.\*;

import java.io.\*;

import java.net.\*;

public class server1{

public static void main(String args[]) throws Exception

{

DatagramSocket ds=new DatagramSocket();

System.out.println("Enter data to send to client");

Scanner sc=new Scanner(System.in);

String rs=sc.nextLine();

//byte buf[]=new byte[1024];

//buf=rs.getBytes();

DatagramPacket dp=new DatagramPacket(rs.getBytes(),rs.length(),InetAddress.getLocalHost(),3000);

ds.send(dp);

}

}

import java.util.\*;

import java.io.\*;

import java.net.\*;

public class oclient{

public static void main(String args[]) throws Exception

{

DatagramSocket ds=new DatagramSocket(3000);

InetAddress ip=InetAddress.getLocalHost();

byte res[]=new byte[1024];

DatagramPacket dpr=new DatagramPacket(res,1024);

ds.receive(dpr);

String rs=new String(res,0,res.length);

System.out.println("Server data is:"+ rs);

}

}

---------------------------------------------------

**week-5:**

1.

**Adder.java:**

import java.rmi.\*;

public interface Adder extends Remote

{

public int add(int x,int y) throws RemoteException;

}

**AdderRemote.java:**

import java.rmi.\*;

import java.rmi.server.UnicastRemoteObject;//optional

public class AdderRemote extends UnicastRemoteObject implements Adder

{

AdderRemote() throws RemoteException

{

super();//reference for unicastRemoteObject

}

public int add(int x,int y) throws RemoteException

{

return x+y;

}

}

**MyClient.java:**

import java.rmi.\*;

import java.io.\*;

public class MyClient{

public static void main(String args[]){

try{

int Number1=0;

int Number2=0;

Adder stub=(Adder)Naming.lookup("rmi://localhost:1099/example");

DataInputStream in=new DataInputStream(System.in);

System.out.print("Enter Number 1:");

Number1=Integer.parseInt(in.readLine());

System.out.print("Enter Number 2:");

Number2=Integer.parseInt(in.readLine());

System.out.println(stub.add(Number1,Number2));

}

catch(Exception e)

{

System.out.println(e);

}

}

}

**MyServer.java:**

import java.rmi.\*;

import java.rmi.registry.\*;

public class MyServer

{

public static void main(String args[]){

try{

Adder skeleton=new AdderRemote();

Naming.rebind("rmi://localhost:1099/example",skeleton);

System.out.println("Server is Ready.....");

System.out.println("Remote Object is Ready.....");

}

catch(Exception e)

{

System.out.print(e);

}

}

}

2.

**MyClient.java:**

import java.rmi.\*;

import java.io.\*;

public class MyClient{

public static void main(String args[])

{

try

{

palind stub=(palind)Naming.lookup("rmi://localhost:9999/examp");

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter String to check palindrome or not:");

String s=br.readLine();

if(stub.ispalind(s))

System.out.println("Given String is palindrome");

else

System.out.println("Given String is not palindrome");

}

catch(Exception e)

{

System.out.println(e);

}

}

}

**Myserver.java:**

import java.rmi.\*;

import java.rmi.registry.\*;

public class MyServer

{

public static void main(String args[])

{

try

{

palind skeleton=new palindR();

Naming.rebind("rmi://localhost:9999/examp",skeleton);

System.out.println("Server is Ready........");

System.out.println("Remote Object is Ready........");

}

catch(Exception e)

{

System.out.println(e);

}

}

}

**palind:**

import java.rmi.\*;

public interface palind extends Remote

{

public boolean ispalind(String s) throws RemoteException;

}

**palindR**:

import java.rmi.\*;

import java.rmi.server.UnicastRemoteObject;

import java.lang.\*;

public class palindR extends UnicastRemoteObject implements palind

{

palindR() throws RemoteException

{

super();

}

public boolean ispalind(String s) throws RemoteException

{

int i=0,j=s.length()-1;

while(i<j)

{

if(s.charAt(i)!=s.charAt(j))

return false;

i++;

j--;

}

return true;

}

}

3.

**length1:**

import java.rmi.\*;

public interface length1 extends Remote

{

public int slength(String s) throws RemoteException;

}

**lengthremote:**

import java.rmi.\*;

import java.rmi.server.UnicastRemoteObject;

import java.lang.\*;

public class lengthRemote extends UnicastRemoteObject implements length1

{

lengthRemote() throws RemoteException

{

super();

}

public int slength(String s) throws RemoteException

{

return s.length();

}

}

**MyClient.java:**

import java.rmi.\*;

import java.io.\*;

public class MyClient{

public static void main(String args[])

{

try

{

length1 stub=(length1)Naming.lookup("rmi://localhost:1099/strex");

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter String to find length:");

String s=br.readLine();

System.out.println("length of string is"+stub.slength(s));

}

catch(Exception e)

{

System.out.println(e);

}

}

}

**MyServer.java:**

import java.rmi.\*;

import java.io.\*;

public class MyClient{

public static void main(String args[])

{

try

{

length1 stub=(length1)Naming.lookup("rmi://localhost:1099/strex");

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter String to find length:");

String s=br.readLine();

System.out.println("length of string is"+stub.slength(s));

}

catch(Exception e)

{

System.out.println(e);

}

}

}

----------------------------------------------------------

6.

**database.txt:**

CREATE TABLE Login

(name VARCHAR2(40),

password VARCHAR2(40),

email VARCHAR2(4000)

)

**login.html:**

<html>

<body>

<form action="Login\_page" method="post">

Name:<input type="text" name="Name"/><br/><br/>

Password:<input type="password" name="Password"/><br/><br/>

Email Id:<input type="text" name="Email"/><br/><br/>

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

</form>

</body>

</html>

**loginExample.java:**

import java.io.\*;

import java.sql.\*;

import javax.servlet.ServletException;

import javax.servlet.http.\*;

public class loginexample extends HttpServlet

{

public void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException

{

response.setContentType("text/html");

PrintWriter out = response.getWriter();

String na=request.getParameter("Name");

String pass=request.getParameter("Password");

String em=request.getParameter("Email");

try

{

Class.forName("oracle.jdbc.driver.OracleDriver");

Connection con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","admin");

PreparedStatement ps=con.prepareStatement("insert into login values(?,?,?)");

ps.setString(1,na);

ps.setString(2,pass);

ps.setString(3,em);

int i=ps.executeUpdate();

if(i>0)

out.print("You are successfully registered...");

}

catch (Exception e)

{

System.out.println(e);

}

out.close();

}

}

**web.xml:**

<web-app>

<servlet>

<servlet-name>Login page</servlet-name>

<servlet-class>login</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>Login page</servlet-name>

<url-pattern>/servlet/login</url-pattern>

</servlet-mapping>

<welcome-file-list>

<welcome-file>login.html</welcome-file>

</welcome-file-list>

</web-app>

------------------------------------------------------------------

7.

java->jdk->lib->tools.jar copythis

paste in tomcat->lib->paste tools.jar

1.create a folder on desktop name HELLO

create a folder in HELLO as WEB-INF,create another text file as Hello.jsp

2.write this program in Hello.jsp

<html>

<body>

<%out.println("Hello World");%>

</body>

</html>

3.deploy this folder into apache tomcat server->tomcat->webapps->paste HELLO folder here.

4.start tomcat server click HELLO o/p displayed.

------------------------------------------------

Number folder new->WEB-INF folder and index.html

code:

<!DOCTYPE html>

<html>

<body>

<form method=get action="test.jsp">

Enter Any Number:<input type=text name=num><br><br>

<input type=submit value="Display">

</form>

</body>

</html>

create web.xml file into WEB-INF

and code:

<web-app>

<servlet>

<servlet-name>xyz</servlet-name>

<jsp-file>/test.jsp</jsp-file>

</servlet>

<servlet-mapping>

<servlet-name>xyz</servlet-name>

<url-pattern>/test</url-pattern>

</servlet-mapping>

<welcome-file-list>

<welcome-file>index.html</welcome-file>

</welcome-file-list>

</web-app>

create test.jsp file in Numbers folder

%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<body>

<font color=red>

<%! int i,n;

String s1;

%>

<% s1= request.getParameter("num");

n=s1.length();

i=0;

do

{

char ch=s1.charAt(i);

switch(ch)

{

case '0': out.println("Zero ");

break;

case '1': out.println("One ");

break;

case '2': out.println("Two ");

break;

case '3': out.println("Three ");

break;

case '4': out.println("Four ");

break;

case '5': out.println("Five ");

break;

case '6': out.println("Six ");

break;

case '7': out.println("Seven ");

break;

case '8': out.println("Eight ");

break;

case '9': out.println("Nine ");

break;

}

i++;

}

while(i<n);

%>

</font>

</body>

</html>