

1. Write a java program to create a login form with user id, password, ok button, and cancel button. Handle key events such that pressing 'l' performs login and pressing 'c' clears text boxes and puts focus on the user id text box. Assume a user table having fields Uid and Password in the database named account.

Solution:

```
import java.sql.*;
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;

public class Question2 extends JFrame implements KeyListener
{
    JLabel l1,l2;
    JTextField username; JPasswordField pass; JButton ok, cancel; Question2()
    {
        l1=new JLabel("UserId:");
        username = new JTextField(20); l2=new JLabel("Password:");
        pass = new JPasswordField(20); ok = new JButton("Ok");
        cancel = new JButton("Cancel"); add(l1);
        add(username); add(l2);
        add(pass); add(ok);
        add(cancel);
        FlowLayout fl = new FlowLayout(FlowLayout.CENTER, 80, 20); setSize(400,400);
        setVisible(true);

        setLayout(fl);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE); ok.addKeyListener(this);
        cancel.addKeyListener(this);
    }

    public void keyPressed(KeyEvent ke)
    {
        if(ke.getKeyChar()=='l')
        {
            try
            {
                Class.forName("com.mysql.cj.jdbc.Driver");
                Connection con = DriverManager.getConnection
                ("jdbc:mysql://localhost:3306/account", "root", "");
                Statement stmt = con.createStatement();
                ResultSet rs = stmt.executeQuery("select * from user");

                while(rs.next())
                {

                    String un = username.getText();
                    char[] pw = new char[12];

                    pw = pass.getPassword();
                    String password = String.valueOf(pw);
                    String name = rs.getString(1);
```

```

String pass = rs.getString(2);

if (un.equals(name) && password.equals(pass))
{
    System.out.println("Login successful");
}
}
stmt.close();
con.close();
}catch(Exception e)
{
    System.out.println(e);
}
}

else if (ke.getKeyChar()=='c')
{
    username.setText(""); pass.setText("");
    username.requestFocus();
}
}

public void keyTyped(KeyEvent ke){

}

public void keyReleased(KeyEvent ke){}

public static void main(String[] args) {
    new Question2();
}
}

```

1.You are hired by a reputed software company which is going to design an application for "Movie Rental System". Your responsibility is to design a schema named MRS and create a table named Movie(id, Title, Genre, Language, Length). Write a program to design a GUI form to take input for this table and insert the data into table after clicking the OK button (10)(2077).

Solution:

```

import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.sql.*;

public class Movie extends JFrame implements ActionListener {
    JFrame jf;
    JTextField t1, t2,t3,t4;
    JLabel l1,l2,l3,l4;
    JButton b1;
    public Movie(){
        jf = new JFrame("Movie Rental System");
        l1= new JLabel("Title");
        l2= new JLabel("Genera");
        l3= new JLabel("Language");

```

```

        l4= new JLabel("Length");
        t1= new JTextField(10);
        t2= new JTextField(10);
        t3= new JTextField(10);
        t4= new JTextField(10);
        b1= new JButton("ADD");
        jf.add(l1);
        jf.add(t1);
        jf.add(l2);
        jf.add(t2);
        jf.add(l3);
        jf.add(t3);
        jf.add(l4);
        jf.add(t4);
        jf.add(b1);
        jf.setSize(500,700);
        jf.setLayout(new FlowLayout());
        b1.addActionListener(this);
        jf.setVisible(true);
        jf.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    }
    public void actionPerformed(ActionEvent ae){
        try{
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/mrs","root","");
            Statement stmt= conn.createStatement();
            System.out.println("Database connected successfully");
            String sql="insert into movie(title, genera, language, length) values (?, ?, ?, ?)";
            PreparedStatement ps= conn.prepareStatement(sql);
            ps.setString(1, t1.getText());
            ps.setString(2, t2.getText());
            ps.setString(3, t3.getText());
            ps.setString(4, t4.getText());
            ps.executeUpdate();
            conn.close();
            System.out.println("Inserted successfully");

        }catch(Exception se){
            System.out.println(se);
        }
    }
    public static void main(String[] args) {
        new Movie();
    }
}

```