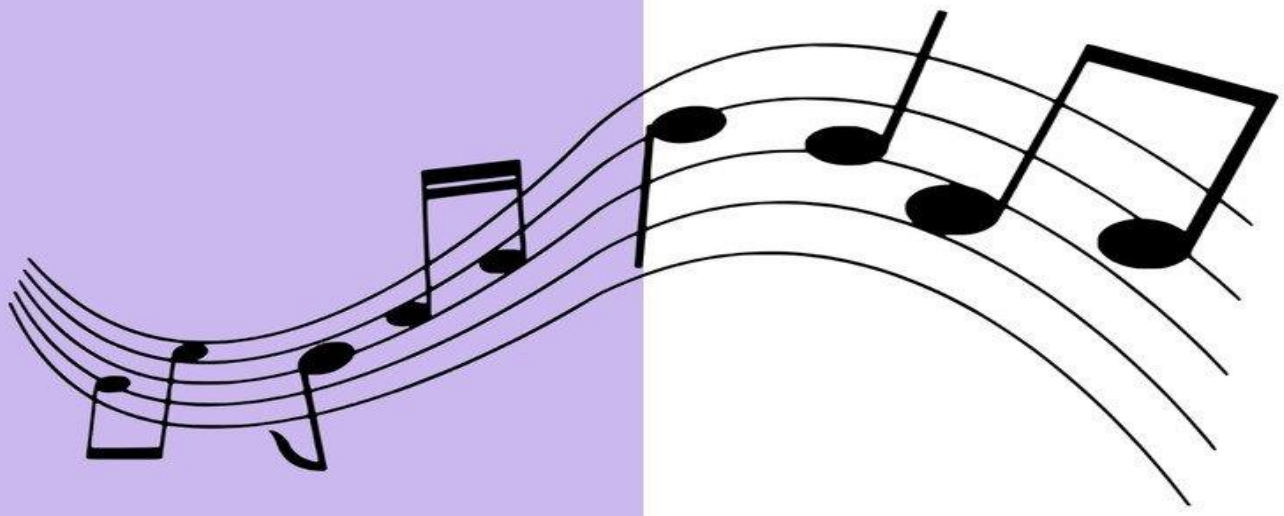

MUSIC LIBRARY
MANAGEMENT SYSTEM

Prepared by:-

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AIM: -

To create a Java application for managing a music library Management system using swing and jdbc.

INTRODUCTION: -

Java is a popular and versatile programming language that's been around since 1995. Java can be used to create a wide variety of applications, from mobile apps to web applications and even large enterprise software.

Object-oriented: Java is based on the idea of objects, which are self-contained entities that model real-world things. This makes code more organized and reusable. Write once, run anywhere (WORA) One of Java's big strengths is its portability. Code written in Java can run on any platform that has a Java Runtime Environment (JRE) installed. This means you can develop your program on one computer and then run it on another without having to make any changes.Java is known for being relatively easy to learn and use, even for beginners. It also has a number of built-in security features that help to protect against common threats.

Swing is a Java Foundation Classes [JFC] library and an extension of the Abstract Window Toolkit [AWT]. Java Swing offers much-improved functionality over AWT, new components, expanded components features, and excellent event handling with drag-and-drop support.

Swing has about four times the number of User Interface [UI] components as AWT and is part of the standard Java distribution. By today's application GUI requirements, AWT is a limited implementation, not quite capable of providing the components required for developing complex GUIs required in modern commercial applications. The AWT component set has quite a few bugs and does take up a lot of system resources when compared to equivalent Swing resources. Netscape introduced its Internet Foundation Classes [IFC] library for use with Java. Its Classes became very popular with programmers creating GUI's for commercial applications.

- Swing is a Set of API (API- Set of Classes and Interfaces)
- Swing is Provided to Design Graphical User Interfaces
- Swing is an Extension library to the AWT (Abstract Window Toolkit)
- Includes New and improved Components that have been enhancing the looks and Functionality of GUIs'

- Swing can be used to build (Develop) The Standalone swing GUI Apps as Servlets and Applets
- It Employs model/view design architecture.
- Swing is more portable and more flexible than AWT, the Swing is built on top of the AWT.
- Swing is Entirely written in Java.
- Java Swing Components are Platform-independent, and The Swing Components are lightweight.
- Swing Supports a Pluggable look and feel and Swing provides more powerful components.
- JDBC stands for Java Database Connectivity. It's an API (Application Programming Interface) that lets Java applications connect and interact with various databases. Essentially, it acts as a translator between Java code and database systems.

Features of jdbc are follows as:-

1. Database Independence: JDBC allows you to connect to different databases using specific drivers, providing flexibility in your choice of database backend.
2. Standard Interface: JDBC offers a consistent way to interact with databases regardless of the underlying system. This simplifies development and reduces code duplication.
3. Database Tasks: Using JDBC, you can perform essential database operations like:
    - Connecting and disconnecting from databases
    - Executing SQL queries (select, create, insert)
    - Retrieving and processing data from databases

Workflow of jdbc follow as: -

1. JDBC Driver: You need a JDBC driver specific to the database you want to connect to. The driver translates JDBC calls into commands the database understands.
2. DriverManager: This class manages the loaded JDBC drivers and helps establish the connection between your Java program and the database.
3. Connection: This object represents the established connection between your program and the database.

4. Statement: JDBC offers various statement objects (Statement, PreparedStatement, CallableStatement) to execute SQL queries and manage parameters.
5. ResultSet: This object holds the results of your queries, allowing you to iterate through the retrieved data.
   JDBC offers a powerful and versatile way for Java applications to interact with databases. If you're developing Java applications that need to store, access, or manipulate data, JDBC is a fundamental tool to have in your toolkit.

This project aims to create a Java application for managing a digital music library. It will utilize JDBC to connect and interact with a database for storing and retrieving music information.which provides the user different facilities like

Add new songs to the library (artist, title, album, genre, etc.),Search for songs by title, artist, album, or genre,Create playlists. It Store and manage your music collection efficiently.Easy Search and Access Quickly find specific songs by searching various

Technologies:

Java: The programming language for developing the application logic.

JDBC: The API for connecting to a database and performing operations.

Database: Choose a database system like MySQL,

Object Structure:

Models: Java classes representing Music objects (containing attributes like title, artist, album, etc.)

Database Access: Java classes responsible for connecting to the database, executing queries (Create, Read, Update,), and handling result sets.

Main Class: The entry point of the application, responsible for initializing the database connection, user interface, and handling user actions.

CODE:-

1. Code for home page of sound archive.

```
package newpackage;
public class Music_Library extends javax.swing.JFrame {
    public Music_Library() {
        initComponents();
    }
    private void initComponents() {

        jButton1 = new javax.swing.JButton();
        jPanel1 = new javax.swing.JPanel();
        jLabel2 = new javax.swing.JLabel();
        jLabel1 = new javax.swing.JLabel();

        jButton1.setBackground(new java.awt.Color(255, 204, 102));
        jButton1.setFont(new java.awt.Font("Tahoma", 0, 24)); // NOI18N
        jButton1.setForeground(new java.awt.Color(204, 102, 0));
        jButton1.setText("Sound Archive");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        getContentPane().add(jButton1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(355, 535, 300, 43));
        jPanel1.add(jLabel2);

        jLabel1.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\Bg1000x700.jpg"));
        jPanel1.add(jLabel1);

        getContentPane().add(jPanel1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 1000, 700));

        pack();
        setLocationRelativeTo(null);
    }

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
        Login secondFrame = new Login();
```

```
        secondFrame.setVisible(true);
    }
    public static void main(String args[]) {

        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Music_Library().setVisible(true);
            }
        });
    }
}
```

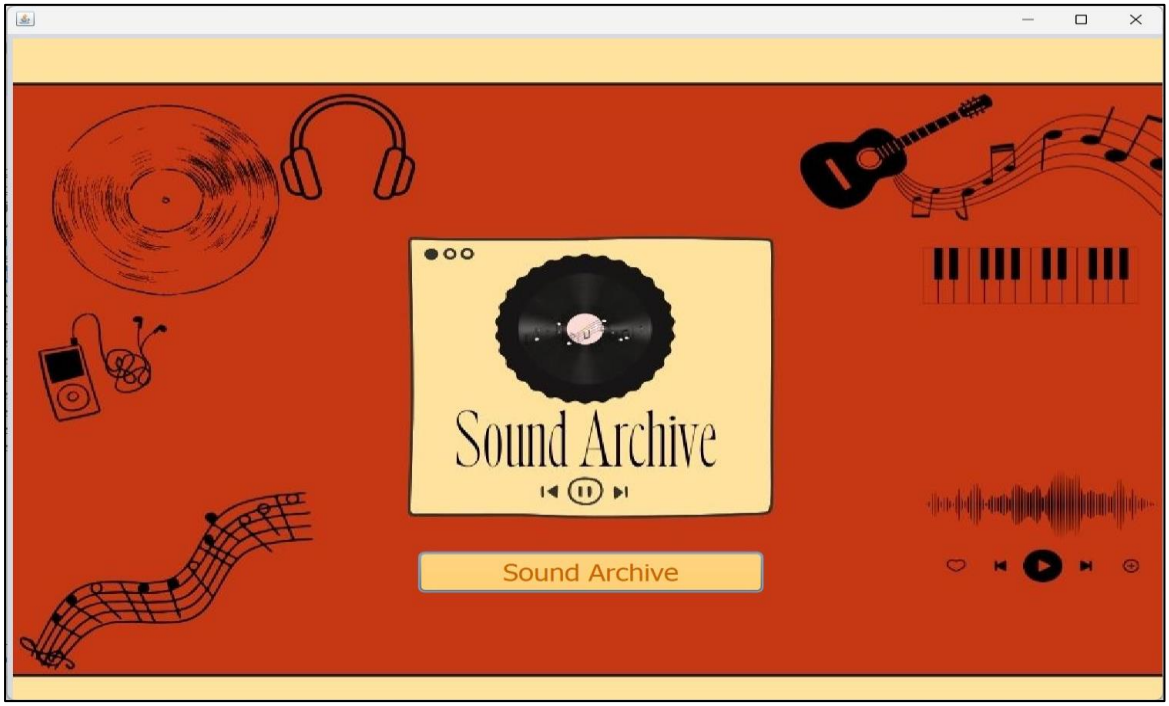

Fig 1: Coverpage of Sound Archive

2. Code for Start Page after clicking on sound archive.

```
package newpackage;
public class Login extends javax.swing.JFrame {
    public Login() {
        initComponents();
    }
    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
```

```
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jLabel2 = new javax.swing.JLabel();

        jButton1.setText("Let's get started ");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jPanel1.add(jButton1);
        jButton1.setBounds(290, 550, 212, 47);
        jButton2.setText("About us");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        jPanel1.add(jButton2);
        jButton2.setBounds(560, 550, 162, 47);

        jLabel2.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\bg2button1000x700.jp
g")); // NOI18N
        jPanel1.add(jLabel2);
        jLabel2.setBounds(0, 0, 1000, 700);

        getContentPane().add(jPanel1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, -1, 700));

        pack();
    }
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
About a1= new About();
a1.setVisible(true);
    }
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
        User u1 = new User();
        u1.setVisible(true);
    }
     java.awt.EventQueue.invokeLater(new Runnable() {
```

```
            public void run() {
                new Login().setVisible(true);
            }
        });
    }
}
```

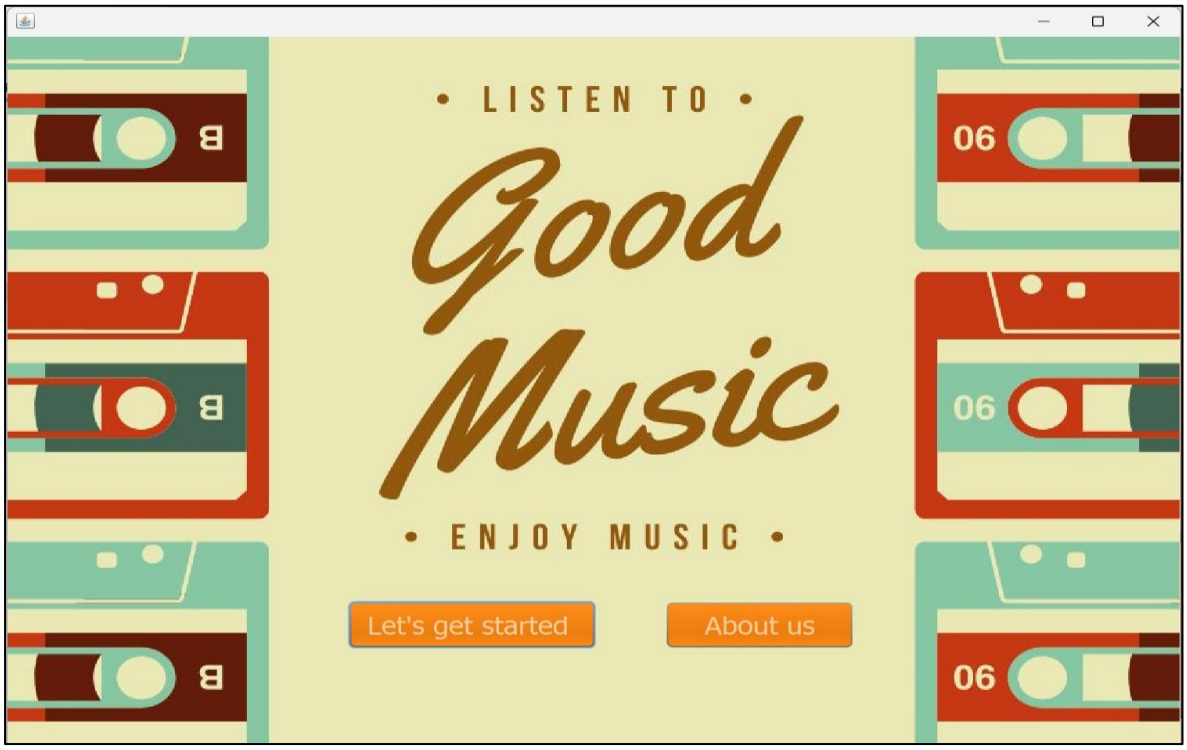

Fig 2 : Start Page after clicking on 'Sound Archive' button.

3 .Code for about us option

Code :

```
 package newpackage;
public class About extends javax.swing.JFrame {

    public About() {
        initComponents();
    }
    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
        jLabel6 = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();
```

```
        jLabel1 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLO
SE);
        getContentPane().setLayout(new
org.netbeans.lib.awtextra.AbsoluteLayout());

        jPanel1.setBackground(new java.awt.Color(204, 51, 0));
        jPanel1.setPreferredSize(new java.awt.Dimension(1000, 700));
        jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

        jLabel6.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\Bglogo1000x700-
removebg-preview.png")); // NOI18N
        jPanel1.add(jLabel6, new
org.netbeans.lib.awtextra.AbsoluteConstraints(350, 10, 320, 290));

        jButton1.setBackground(new java.awt.Color(255, 204, 102));
        jButton1.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
        jButton1.setText("Back");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jPanel1.add(jButton1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(135, 6, -1, -1));

        jLabel1.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\Nametag\\2.2.jpg")); //
NOI18N
        jPanel1.add(jLabel1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(360, 320, -1, -1));

        jLabel3.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\Nametag\\1.1.jpg")); //
NOI18N
        jPanel1.add(jLabel3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 320, -1, -1));
```

```
        jLabel2.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\Nametag\\3.3.jpg")); //
NOI18N
        jPanel1.add(jLabel2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(200, 470, -1, -1));

        jLabel4.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\Nametag\\4.4.jpg")); //
NOI18N
        jPanel1.add(jLabel4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(530, 470, -1, -1));

        jLabel5.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\Nametag\\5.5.jpg")); //
NOI18N
        jPanel1.add(jLabel5, new
org.netbeans.lib.awtextra.AbsoluteConstraints(670, 320, -1, -1));

        getContentPane().add(jPanel1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 1069, 822));

        pack();
    }

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
Login l1= new Login();
l1.setVisible(true);
    }
    public static void main(String args[]) {

        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new About().setVisible(true);
            }
        });
    }


}
```

Fig3: - Output after clicking 'About Us' button

4. Code for Registration form.

```
package newpackage;
import javax.swing.*;
import java.awt.event.*;
import javax.swing.JOptionPane;
import java.awt.Component;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class User extends javax.swing.JFrame {

    public User() {
        initComponents();
```

```
    }

     private void initComponents() {

       jPanel1 = new javax.swing.JPanel();
       jPanel2 = new javax.swing.JPanel();
       jLabel2 = new javax.swing.JLabel();
       jLabel3 = new javax.swing.JLabel();
       jTextField1 = new javax.swing.JTextField();
       jButton1 = new javax.swing.JButton();
       jLabel4 = new javax.swing.JLabel();
       jLabel7 = new javax.swing.JLabel();
       jTextField2 = new javax.swing.JTextField();
       jTextField3 = new javax.swing.JTextField();
       jTextField4 = new javax.swing.JTextField();
       jButton2 = new javax.swing.JButton();
       jLabel1 = new javax.swing.JLabel();


      jLabel2.setText("Username");
       jPanel2.add(jLabel2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(350, 156, -1, 30));

       jLabel3.setText("Password");
       jPanel2.add(jLabel3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(350, 230, -1, -1));

       jTextField1.addActionListener(new java.awt.event.ActionListener() {
           public void actionPerformed(java.awt.event.ActionEvent evt) {
               jTextField1ActionPerformed(evt);
           }
       });
       jPanel2.add(jTextField1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(470, 160, 200, -1));


     jButton1.setText("Register");
       jButton1.addActionListener(new java.awt.event.ActionListener() {
           public void actionPerformed(java.awt.event.ActionEvent evt) {
               jButton1ActionPerformed(evt);
           }
       });
       jPanel2.add(jButton1, new
```

```
org.netbeans.lib.awtextra.AbsoluteConstraints(320, 320, 130, -1));

        jLabel4.setText("Name");
        jPanel2.add(jLabel4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(350, 40, 80, 20));

        jLabel7.setText("Email Id");
        jPanel2.add(jLabel7, new
org.netbeans.lib.awtextra.AbsoluteConstraints(350, 100, 60, 20));

        jTextField2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jTextField2ActionPerformed(evt);
            }
        });
        jPanel2.add(jTextField2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(470, 40, 200, -1));
        jPanel2.add(jTextField3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(470, 100, 200, -1));
        jPanel2.add(jTextField4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(470, 230, 200, -1));

        jButton2.setBackground(new java.awt.Color(102, 51, 0));
        jButton2.setForeground(new java.awt.Color(255, 204, 153));
        jButton2.setText("Back");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        jPanel2.add(jButton2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(540, 320, 130, -1));

        jLabel1.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\Bgregister1000x700.jp
g")); // NOI18N
        jPanel2.add(jLabel1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 1000, 700));

        jPanel1.add(jPanel2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 1000, 700));

        getContentPane().add(jPanel1, new
```

```
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 1000, 700));

        pack();
        setLocationRelativeTo(null);
    }

     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
    if(jTextField1.getText().equals("")) {
     JOptionPane.showMessageDialog(rootPane, "Incomplete Credentials ");
    }else if(jTextField4.getText().equals("")){
      JOptionPane.showMessageDialog(rootPane, "Incomplete Credentials ");
    }
    else if(jTextField2.getText().equals("")){
      JOptionPane.showMessageDialog(rootPane, "Incomplete Credentials ");
    }
    else if(jTextField3.getText().equals(""))
    {
      JOptionPane.showMessageDialog(rootPane, " Incomplete Credentials ");
    }
    else {
      JOptionPane.showMessageDialog(rootPane, "Registered Successfully");
 try
        {
            String name, email,username, password;
            name=jTextField2.getText();
            email=jTextField3.getText();
            username=jTextField1.getText();
            password=jTextField4.getText();
            Class.forName("com.mysql.cj.jdbc.Driver");
            System.out.println("Registered");
            Connection con;
            Statement smt;
            con=DriverManager.getConnection("jdbc:mysql://localhost/music_libr
ary", "root", "mysql");
            System.out.println("Connection Sucessful");
            smt=con.createStatement();
            String sql="insert into user
values('"+name+"','"+email+"','"+username+"','"+password+"');";
            smt.executeUpdate(sql);

            smt.close();
            con.close();
```

```
        }
        catch(SQLException se)
        {
           se.printStackTrace();
        }
        catch(Exception e)
        {
           e.printStackTrace();
        }
Home h1 = new Home();
h1.setVisible(true);// TODO add your handling code here:
    }
    }
    private void jTextField2ActionPerformed(java.awt.event.ActionEvent evt)
{
        }
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
Login l1= new Login();
l1.setVisible(true);// TODO add your handling code here:
    }
     public static void main(String args[]) {
             java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
               new User().setVisible(true);
            }
        }); }
```

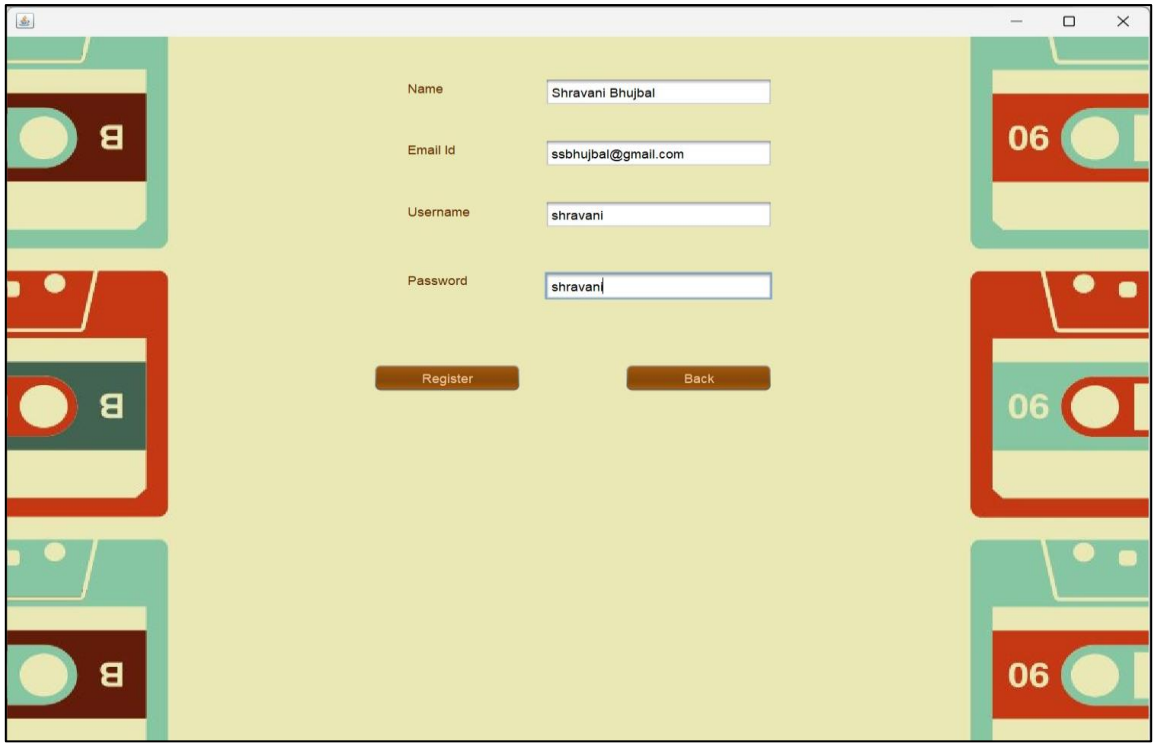

Fig4: - After clicking ‘Let’s get started’ button registration form opens

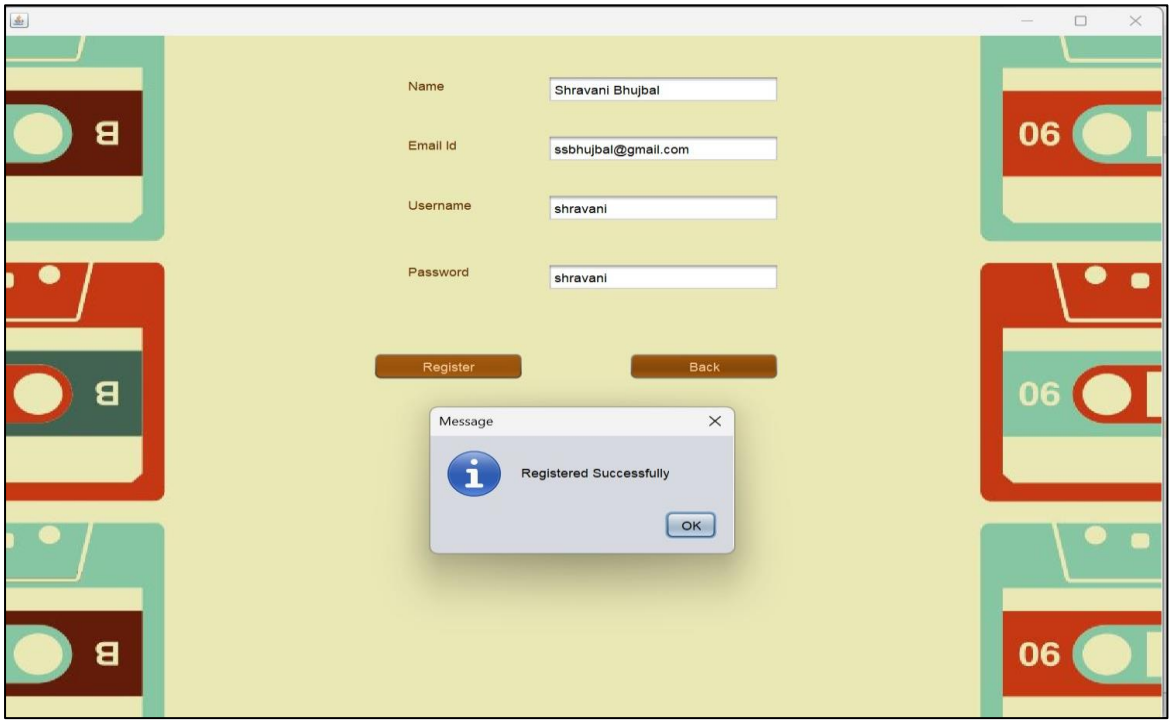

Fig5: - Output for Registered Successfully.

```
mysql> select * from user;
+-----------------+-------------------------+----------------+-----------+
| name            | email                   | username       | password  |
+-----------------+-------------------------+----------------+-----------+
| Shruti Bhujbal  | shrutibhujbal@gmail.com | shrutib        | shruti    |
| Eesarah Kazi    | eesarahkazi@gmail.com   | eesarahk       | eesarah   |
| Shubhangi Dethe | shubhangidethe@gmail.com| shubhangidethe | shubhangi |
| Kajal Lamane    | kajallamane@gmail.com   | kajal          | kajal     |
| Ritika Maurya   | ritikamaurya@gmail.com  | ritika         | ritika    |
| Shravani Bhujbal| ssbhujbal@gmail.com     | shravani       | shravani  |
+-----------------+-------------------------+----------------+-----------+
6 rows in set (0.00 sec)
```

Fig6: - After registeration entries are stored in sql table.

5 . Code for homepage that opens after registration.

```
package newpackage;

import javax.swing.*;
import java.awt.event.*;
import javax.swing.JOptionPane;
import java.awt.Component;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class Home extends javax.swing.JFrame {


    public Home() {
        initComponents();
    }

    private void initComponents() {

        panel1 = new java.awt.Panel();
        jButton1 = new javax.swing.JButton();
        jScrollPane1 = new javax.swing.JScrollPane();
```

```
        jTable1 = new javax.swing.JTable();
        jButton2 = new javax.swing.JButton();
        jLabel1 = new javax.swing.JLabel();

        jButton1.setText("View Songs");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        panel1.add(jButton1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(207, 6, -1, -1));

        jTable1.setBackground(new java.awt.Color(255, 204, 153));
        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {

            },
            new String [] {
                "m_id", "Name", "Artist", "Genre"
            }
        ));
        jScrollPane1.setViewportView(jTable1);

        panel1.add(jScrollPane1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(60, 250, 848, 280));

        jButton2.setBackground(new java.awt.Color(204, 102, 0));
        jButton2.setForeground(new java.awt.Color(255, 204, 153));
        jButton2.setText("Add song");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        panel1.add(jButton2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(660, 6, -1, -1));



    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
 try {
```

```
    Class.forName("com.mysql.cj.jdbc.Driver");
    System.out.println("Registered");
    Connection con;
    Statement smt;
    con=DriverManager.getConnection("jdbc:mysql://localhost/music_library",
"root", "mysql");
    System.out.println("Connection Sucessful");
    smt=con.createStatement();
    String sql= "select m_id,name,artist,genre from music;";
     try (ResultSet rs = smt.executeQuery(sql)) {
         while(rs.next()) {
             String m_id = String.valueOf(rs.getInt("m_id"));
             String Name = rs.getString("name");
             String Artist = rs.getString("artist");
             String Genre = rs.getString("genre");
             String tbldata[]={m_id, Name, Artist, Genre};
             DefaultTableModel
tbmode1=(DefaultTableModel)jTable1.getModel();
             tbmode1.addRow(tbldata);
         }}
    smt.close();
    con.close();
} catch(SQLException se) {
    se.printStackTrace();
} catch(Exception e) {
    e.printStackTrace();
}



    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
        Add a1 = new Add();
a1.setVisible(true);
    }

  public static void main(String args[]) {

        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Home().setVisible(true);
            }
```

```
        });
    }

}
```

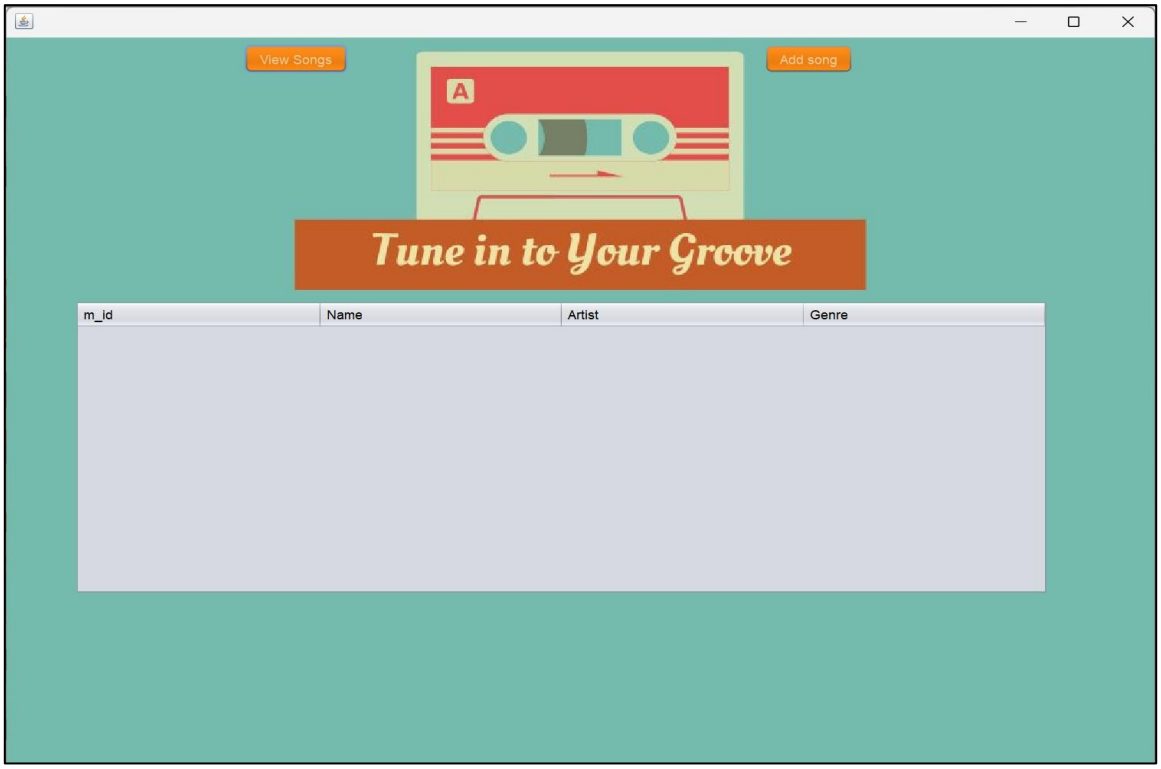

Fig 7: - Homepage opens after registration.

6. Code for homepage of add song

```
package newpackage;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import java.sql.Statement;
import javax.swing.JOptionPane;
public class Add extends javax.swing.JFrame {
    public Add() {
        initComponents();
    }
```

```
    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jTextField1 = new javax.swing.JTextField();
        jTextField2 = new javax.swing.JTextField();
        jRadioButton1 = new javax.swing.JRadioButton();
        jRadioButton2 = new javax.swing.JRadioButton();
        jRadioButton3 = new javax.swing.JRadioButton();
        jButton1 = new javax.swing.JButton();
        jRadioButton4 = new javax.swing.JRadioButton();
        jRadioButton5 = new javax.swing.JRadioButton();
        jRadioButton6 = new javax.swing.JRadioButton();
        jButton2 = new javax.swing.JButton();
        jLabel9 = new javax.swing.JLabel();
        jLabel2.setText("Name");
        jPanel1.add(jLabel2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(634, 163, -1, -1));
        jLabel3.setText("Artist");
        jPanel1.add(jLabel3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(637, 227, -1, -1));
        jLabel4.setText("Genre");
        jPanel1.add(jLabel4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(637, 301, -1, -1));
        jPanel1.add(jTextField1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(721, 160, 150, -1));

        jTextField2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jTextField2ActionPerformed(evt);
            }
        });
        jPanel1.add(jTextField2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(721, 224, 150, -1));

        jRadioButton1.setText("Pop");
        jPanel1.add(jRadioButton1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(721, 299, -1, -1))
        jRadioButton2.setText("Classical");
        jRadioButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
            jRadioButton2ActionPerformed(evt);
        }
    });
    jPanel1.add(jRadioButton2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(832, 299, -1, -1));

    jRadioButton3.setText("Jazz");
    jRadioButton3.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jRadioButton3ActionPerformed(evt);
        }
    });
    jPanel1.add(jRadioButton3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(721, 361, -1, -1));

    jButton1.setBackground(new java.awt.Color(204, 102, 0));
    jButton1.setForeground(new java.awt.Color(255, 153, 102));
    jButton1.setText("SUBMIT");
    jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });
    jPanel1.add(jButton1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(690, 485, -1, -1));

    jRadioButton4.setText("Rock");
    jRadioButton4.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jRadioButton4ActionPerformed(evt);
        }
    });
    jPanel1.add(jRadioButton4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(832, 361, -1, -1));

    jRadioButton5.setText("Folk");
    jPanel1.add(jRadioButton5, new
org.netbeans.lib.awtextra.AbsoluteConstraints(721, 418, -1, -1));

    jRadioButton6.setText("Rap");
    jPanel1.add(jRadioButton6, new
org.netbeans.lib.awtextra.AbsoluteConstraints(832, 418, -1, -1));
    jButton2.setText("HOME");
```

```
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        jPanel1.add(jButton2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(857, 485, -1, -1));

        jLabel9.setIcon(new
javax.swing.ImageIcon("C:\\Users\\Shree\\Downloads\\BgAdd1000x700.jpg"));
// NOI18N
        jLabel9.setText("jLabel9");
        jPanel1.add(jLabel9, new org.netbeans.lib.awtextra.AbsoluteConstraints(0,
0, 1000, 700));

        getContentPane().add(jPanel1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 1000, 700));

        pack();
        setLocationRelativeTo(null);
    }

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
 try {
    String name, artist, genre = "";
    name = jTextField1.getText();
    artist = jTextField2.getText();


    if(jRadioButton1.isSelected()) {
        genre = "Pop";
    } else if(jRadioButton2.isSelected()) {
        genre = "Classical";
    } else if(jRadioButton3.isSelected()) {
        genre = "Jazz";
    } else if(jRadioButton4.isSelected()) {
        genre = "Rock";
    } else if(jRadioButton5.isSelected()) {
        genre = "Folk";
    } else if(jRadioButton6.isSelected()) {
        genre = "Rap";
    }
```

```
    Class.forName("com.mysql.cj.jdbc.Driver");
    System.out.println("Registered");
    Connection con;
    Statement smt;
    con = DriverManager.getConnection("jdbc:mysql://localhost/music_library",
"root", "mysql");
    System.out.println("Connection Successful");
    smt = con.createStatement();
    String sql = "insert into music (name, artist, genre) values ('" + name + "','" +
artist + "','" + genre + "');";
    smt.executeUpdate(sql);
    JOptionPane.showMessageDialog(jButton1, "Added Successfully!!! ");
    smt.close();
    con.close();
} catch (SQLException se) {
    se.printStackTrace();
} catch (Exception e) {
    e.printStackTrace();
}



    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
Home h1= new Home();
h1.setVisible(true);
    }


    public static void main(String args[]) {
   java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Add().setVisible(true);
            }
        });
    }


}
```

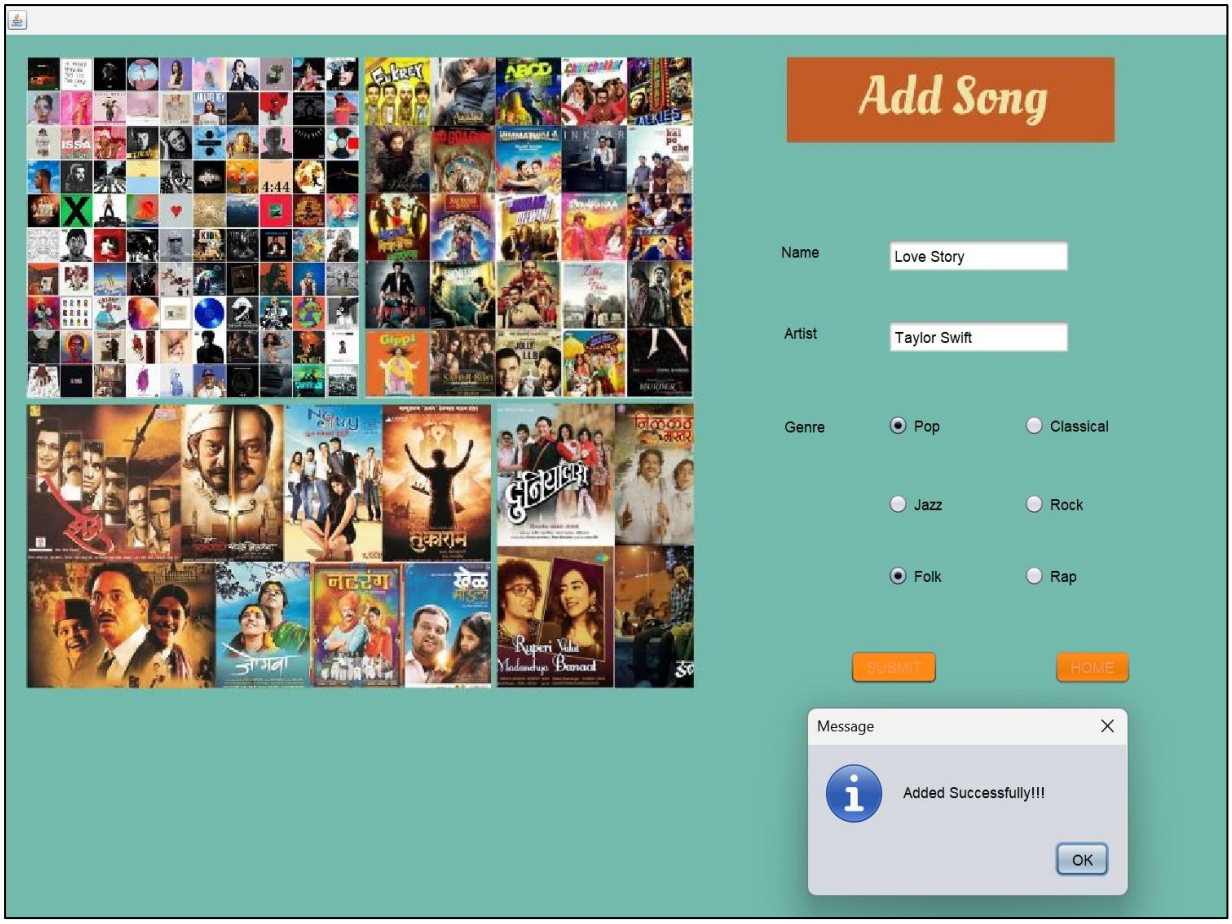

Fig 8: - Homepage of add song.

Fig 9: - Output of songs added in playlist .

```
mysql> select * from music;
+------+--------------------+--------------+-------+
| m_id | name               | artist       | genre |
+------+--------------------+--------------+-------+
|    1 | Still With You     | Jungkook     | Pop   |
|    2 | Memories           | Conan Gray   | Pop   |
|    3 | When you are gone  | Shawn Mendes | Pop   |
|    4 | Dynamite           | BTS          | Pop   |
|    5 | When we were young | Adele        | Pop   |
|    6 | Flowers            | Jisoo        | Pop   |
|    7 | Love Story         | Taylor Swift | Pop   |
+------+--------------------+--------------+-------+
7 rows in set (0.00 sec)
```

Fig 10: -Music entries added to SQL Database.

RESULTS:

The music library management system has been created and executed successfully using java Database Connectivity with Mysql and swing by applying implementations

CONCLUSION:

The project provides a foundation for building a music library management application. As it can customize and extend it based on the specific interests and explore more advanced features as a progress.