

Java

```
package com.example.lab10;
```

```
import android.database.Cursor;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    DatabaseHelper dbHelper;
    EditText nameEditText, messageEditText;
    Button submitButton, viewMessagesButton;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
```

```
        dbHelper = new DatabaseHelper(this);
        nameEditText = findViewById(R.id.name);
        messageEditText = findViewById(R.id.message);
        submitButton = findViewById(R.id.submit);
        viewMessagesButton = findViewById(R.id.view_messages);
```

```
        submitButton.setOnClickListener(new View.OnClickListener() {
```

```
            @Override
```

```
            public void onClick(View v) {
```

```
                String name = nameEditText.getText().toString();
```

```
                String message = messageEditText.getText().toString();
```

```
                if (name.isEmpty() || message.isEmpty()) {
```

```
                    Toast.makeText(MainActivity.this, "Please fill all fields", Toast.LENGTH_SHORT).show();
```

```
                } else {
```

```
                    boolean isInserted = dbHelper.insertData(name, message);
```

```
                    if (isInserted) {
```

```
                        Toast.makeText(MainActivity.this, "Message Sent", Toast.LENGTH_SHORT).show();
```

```
                    } else {
```

```
                        Toast.makeText(MainActivity.this, "Message Sending Failed",
```

```
Toast.LENGTH_SHORT).show();
```

```
                    }
```

```
                }
```

```
            }
```

```
        });
```

```

viewMessagesButton.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Cursor cursor = dbHelper.getData();
        if (cursor.getCount() == 0) {
            Toast.makeText(MainActivity.this, "No Messages Found",
Toast.LENGTH_SHORT).show();
            return;
        }

        StringBuilder messages = new StringBuilder();
        while (cursor.moveToNext()) {
            messages.append("ID: ").append(cursor.getInt(0)).append("\n");
            messages.append("Name: ").append(cursor.getString(1)).append("\n");
            messages.append("Message: ").append(cursor.getString(2)).append("\n\n");
        }
        Toast.makeText(MainActivity.this, messages.toString(), Toast.LENGTH_LONG).show();
    }
});
}
}

```

xml

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">

    <EditText
        android:id="@+id/name"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Your Name" />

    <EditText
        android:id="@+id/message"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Your Message" />

    <Button
        android:id="@+id/submit"

```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Send" />
```

```
<Button
    android:id="@+id/view_messages"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="View Messages" />
</LinearLayout>
```

Java/com.example.lab10/DatabaseHelper

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">

    <EditText
        android:id="@+id/name"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Your Name" />

    <EditText
        android:id="@+id/message"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Your Message" />

    <Button
        android:id="@+id/submit"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Send" />

    <Button
        android:id="@+id/view_messages"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="View Messages" />
</LinearLayout>
```