

CODE:

MainActivity.java

```
package com.example.a1nt21is400_hadpro1;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.widget.Toast;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    private TextView textview;
    private Button button;
    private int clickCount = 0;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        textview = findViewById(R.id.textView2);
        button = findViewById(R.id.button);

        button.setOnClickListener(new View.OnClickListener(){
            @Override
            public void onClick(View v){
                clickCount++;
                String message = "Button Clicked "+clickCount+"times!";
                textview.setText(message);
            }
        });
    }

    @Override
    protected void onStart() {
        Toast toast = Toast.makeText(this, "Activity Started", Toast.LENGTH_LONG);
        toast.show();
        super.onStart();
    }

    @Override
    protected void onRestart() {
        Toast toast = Toast.makeText(this, "Activity Restarted", Toast.LENGTH_LONG);
        toast.show();
        super.onRestart();
    }

    @Override
    protected void onPause() {
        Toast toast = Toast.makeText(this, "Activity Paused", Toast.LENGTH_LONG);
```

```

        toast.show();
        super.onPause();
    }
    @Override
    protected void onResume() {
        Toast toast = Toast.makeText(this, "Activity Resumed", Toast.LENGTH_LONG);
        toast.show();
        super.onResume();
    }
    @Override
    protected void onStop() {
        Toast toast = Toast.makeText(this, "Activity Stopped", Toast.LENGTH_LONG);
        toast.show();
        super.onStop();
    }
    @Override
    protected void onDestroy() {
        Toast toast = Toast.makeText(this, "Activity Destroyed", Toast.LENGTH_LONG);
        toast.show();
        super.onDestroy();
    }
}

```

Activity_main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">

    <ImageView
        android:id="@+id/imageView2"
        android:layout_width="608dp"
        android:layout_height="970dp"
        android:scaleType="fitXY"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:srcCompat="@drawable/image2" />

    <TextView
        android:id="@+id/textView"

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="122dp"
        android:text="HAD LAB PROGRAM 1"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

```

```
<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="294dp"
    android:text="Button"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent" />
```

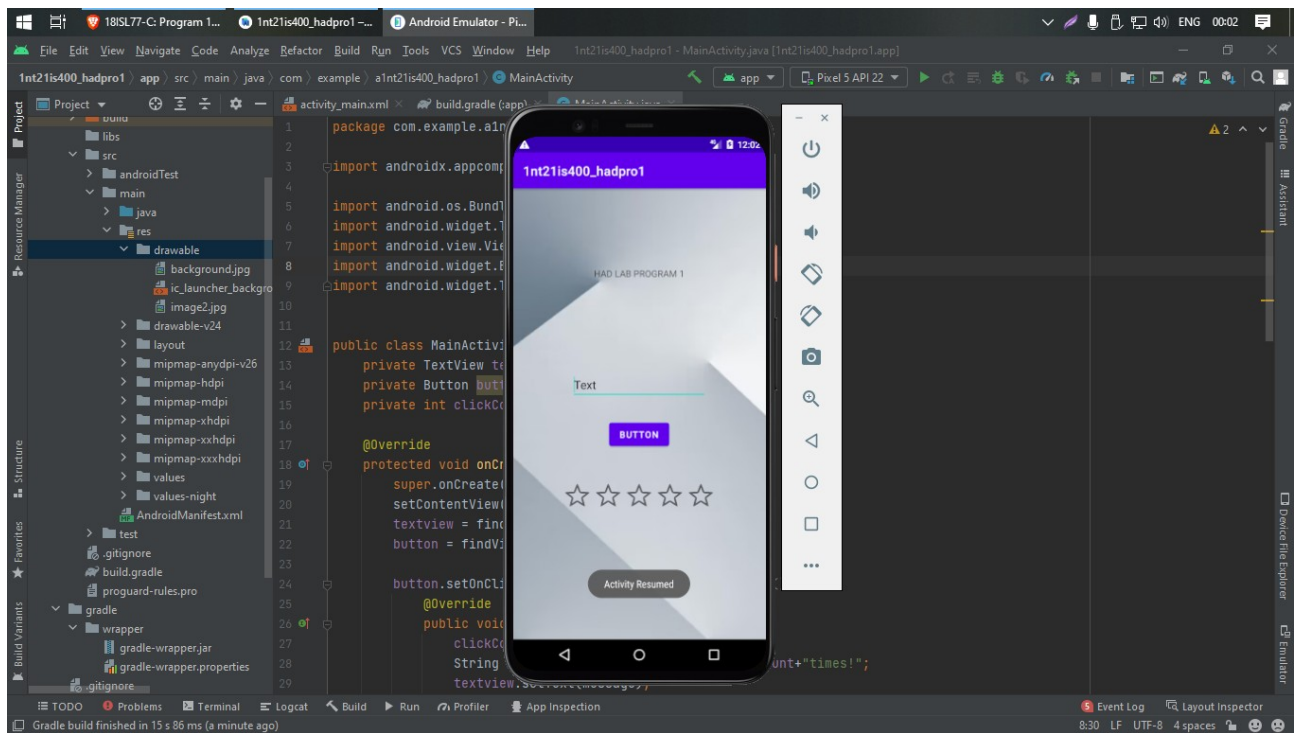
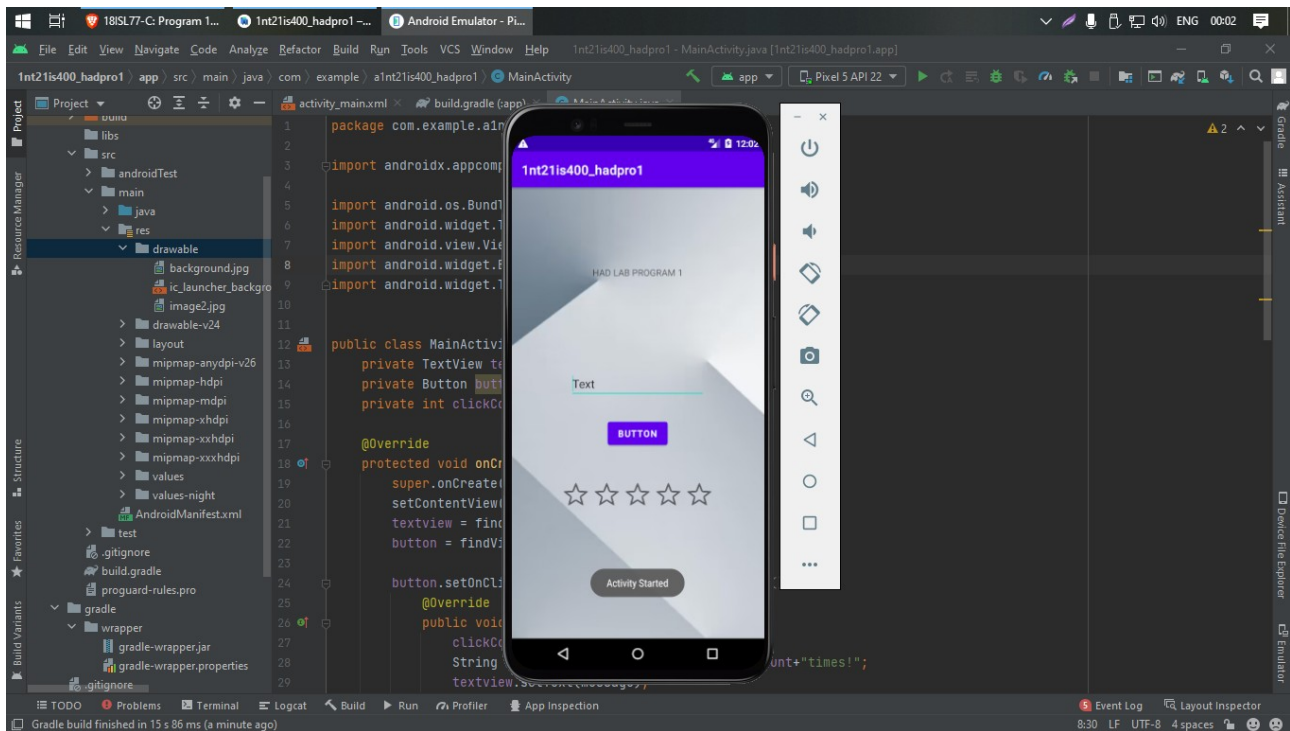
```
<EditText
    android:id="@+id/textView2"

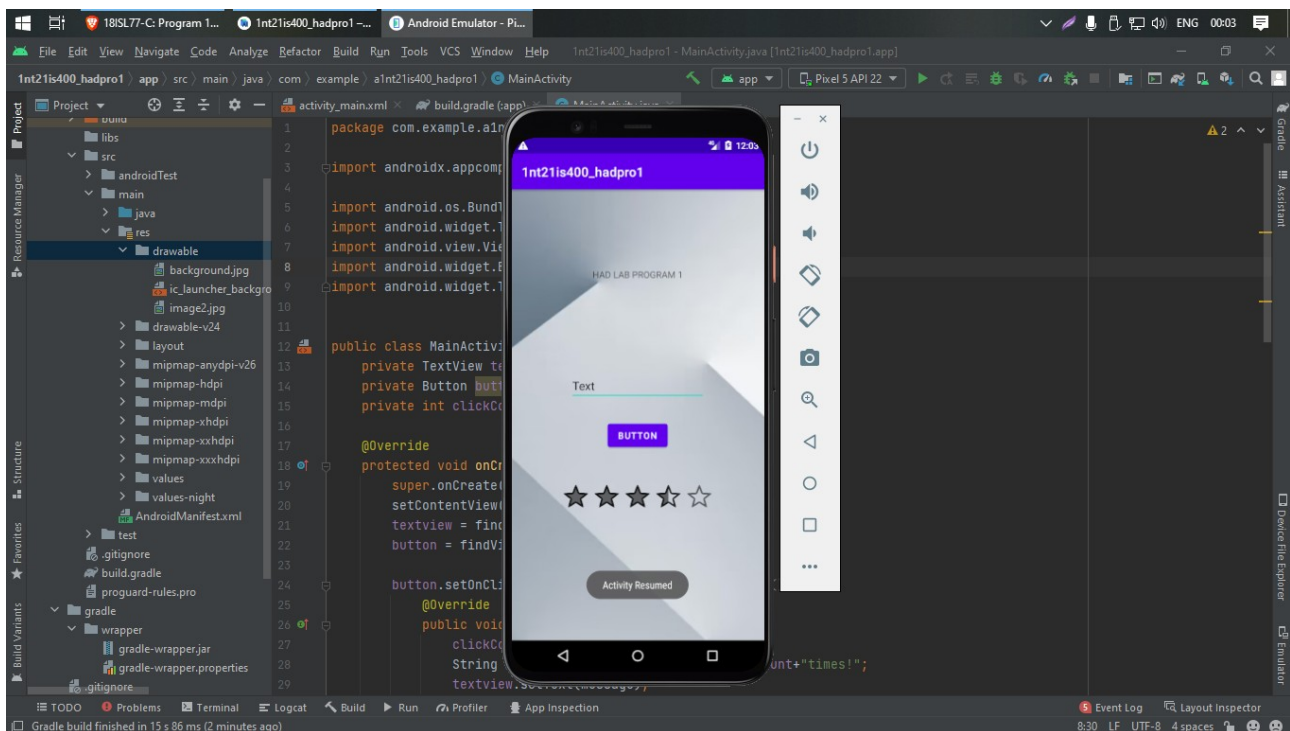
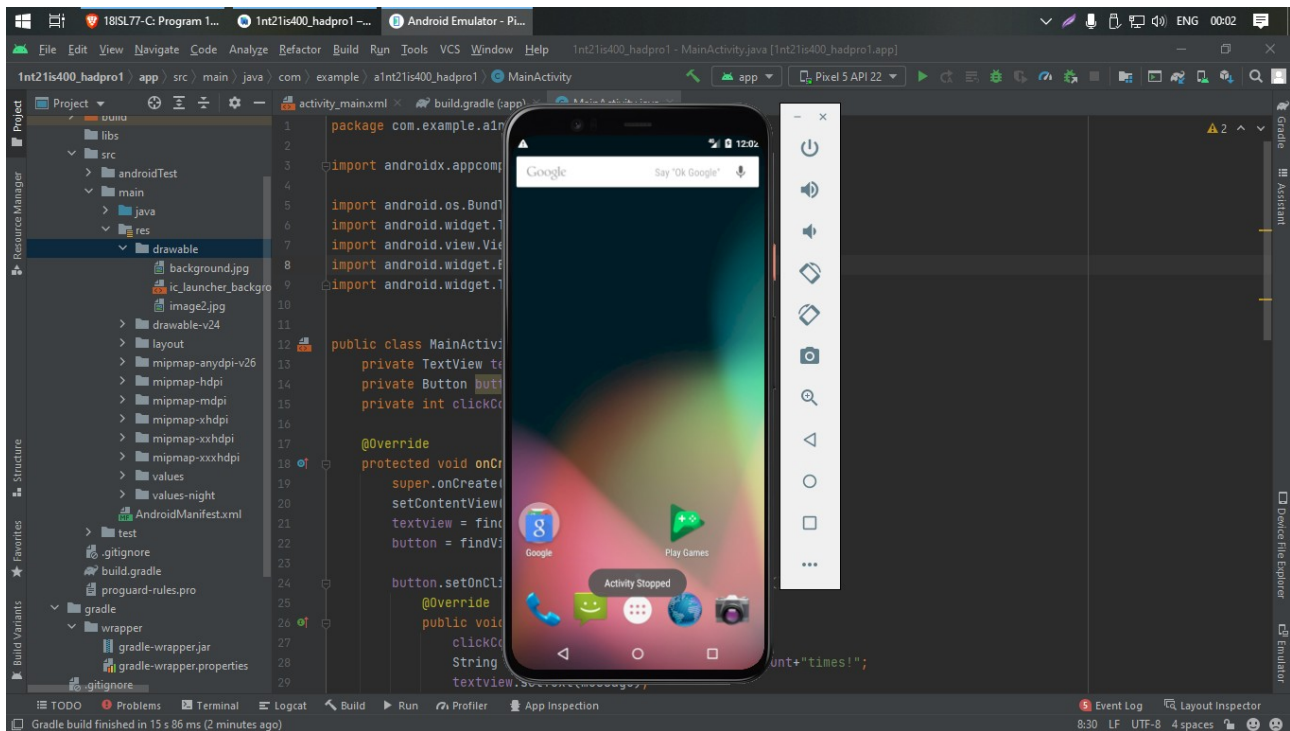
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="30dp"
    android:ems="10"
    android:inputType="textPersonName"
    android:text="Text"
    app:layout_constraintBottom_toTopOf="@+id/button"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent" />
```

```
<RatingBar
    android:id="@+id/ratingBar"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="46dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/button"
    tools:ignore="SpeakableTextPresentCheck" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

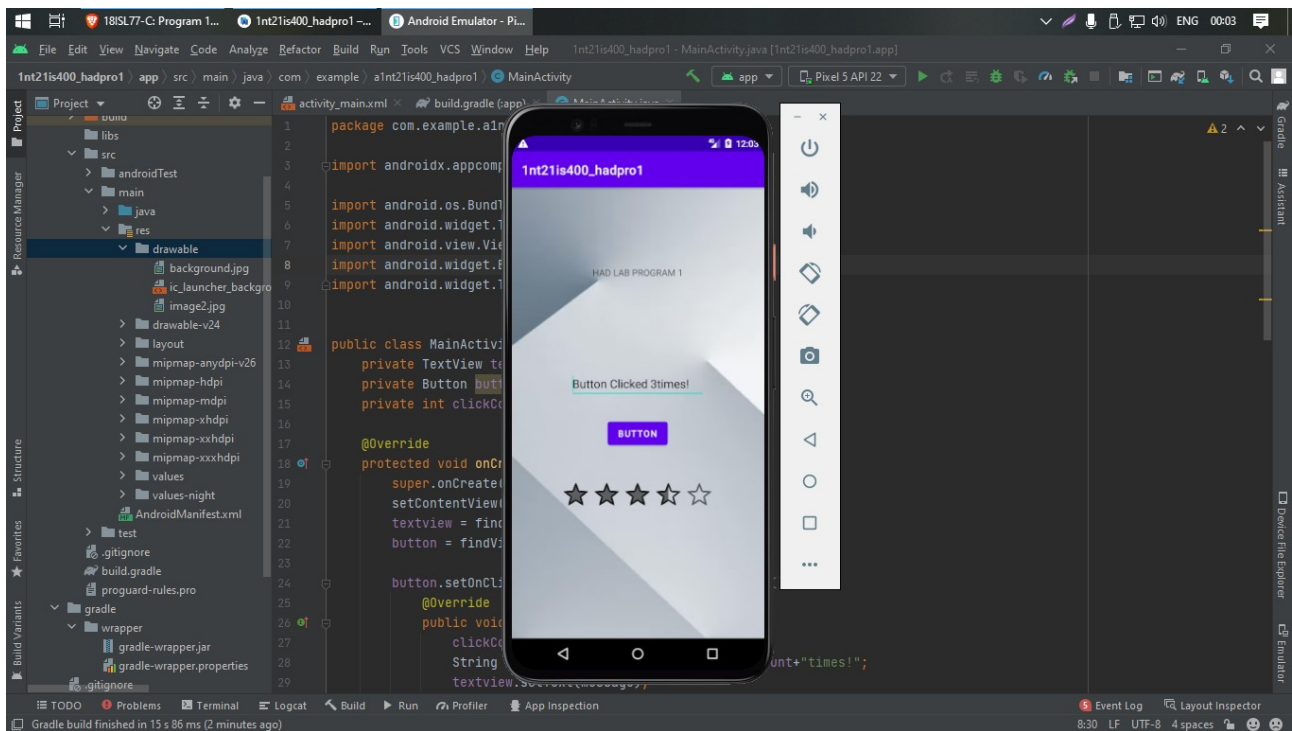
OUTPUT: ACTIVITY LIFECYCLE





UI COMPONENTS

- **TextView**
- **EditText**
- **ImageView**
- **Button**
- **Rating bar**



Android Studio Editor

