Practical 1:

Creating Your First Android App: Set up Android Studio and create a basic "Hello World" app.

Code:

MainActivity.java

```java
package com.example.helloworld;

import android.os.Bundle;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        EdgeToEdge.enable(this);

        setContentView(R.layout.activity_main);

    }

}
```

activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout

    xmlns:android="http://schemas.android.com/apk/res/android"

    xmlns:tools="http://schemas.android.com/tools"

    xmlns:app="http://schemas.android.com/apk/res-auto"

    android:id="@+id/main"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    tools:context=".MainActivity">
```
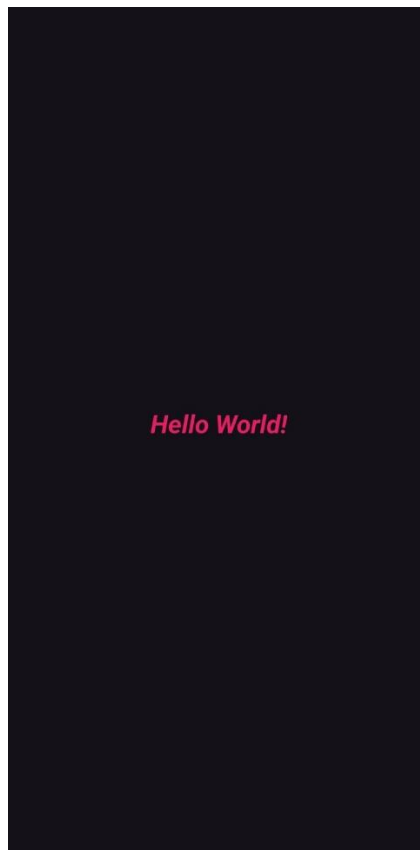
```xml
    <TextView

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Hello World!"

        android:textColor="#E91E63"

        android:textSize="24sp"

        android:textStyle="bold|italic"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent" />
   </androidx.constraintlayout.widget.ConstraintLayout>
```

Output:

Practical 2:

Creating Android App to implement basic activity and design layout using xml. (3 buttons Send, Receive, Delete & Toast a message when click on button).

Code:

MainActivity.java

```java
package com.example.practical2;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.Toast;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {

    private Button Send,Receive,Delete;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        EdgeToEdge.enable(this);

        setContentView(R.layout.activity_main);

        Send = findViewById(R.id.SendBtn);

        Receive = findViewById(R.id.ReceiveBtn);

        Delete = findViewById(R.id.deleteBtn);

        Send.setOnClickListener(this);

        Receive.setOnClickListener(this);

        Delete.setOnClickListener(this);

    }

    @Override

    public void onClick(View view) {
```

```java
        if (view.getId() == R.id.SendBtn) {

            showToast("Message Sent Successfully!");

        } else if (view.getId() == R.id.ReceiveBtn) {

            showToast("New Message Received!");

        } else if (view.getId() == R.id.deleteBtn) {

            showToast("Message Deleted!");

        }

    }

    private void showToast(String message) {

        Toast.makeText(this, message, Toast.LENGTH_SHORT).show();

    }

}
```

activity_main.xml

```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:id="@+id/main"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    tools:context=".MainActivity">

    <Button

        android:id="@+id/SendBtn"

        android:layout_width="134dp"

        android:layout_height="56dp"

        android:layout_marginTop="92dp"

        android:text="Send"

        android:textColor="#00BCD4"
```

```xml
        android:textSize="28sp"

        app:layout_constraintBottom_toTopOf="@+id/ReceiveBtn"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.201"

        tools:ignore="MissingConstraints" />

    <Button

        android:id="@+id/ReceiveBtn"

        android:layout_width="158dp"

        android:layout_height="58dp"

        android:text="Receive"

        android:textColor="#00BCD4"

        android:textSize="28sp"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.498"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        tools:ignore="MissingConstraints" />

    <Button

        android:id="@+id/deleteBtn"

        android:layout_width="150dp"

        android:layout_height="56dp"

        android:layout_marginBottom="4dp"

        android:text="Delete"

        android:textColor="#00BCD4"

        android:textSize="28sp"
```
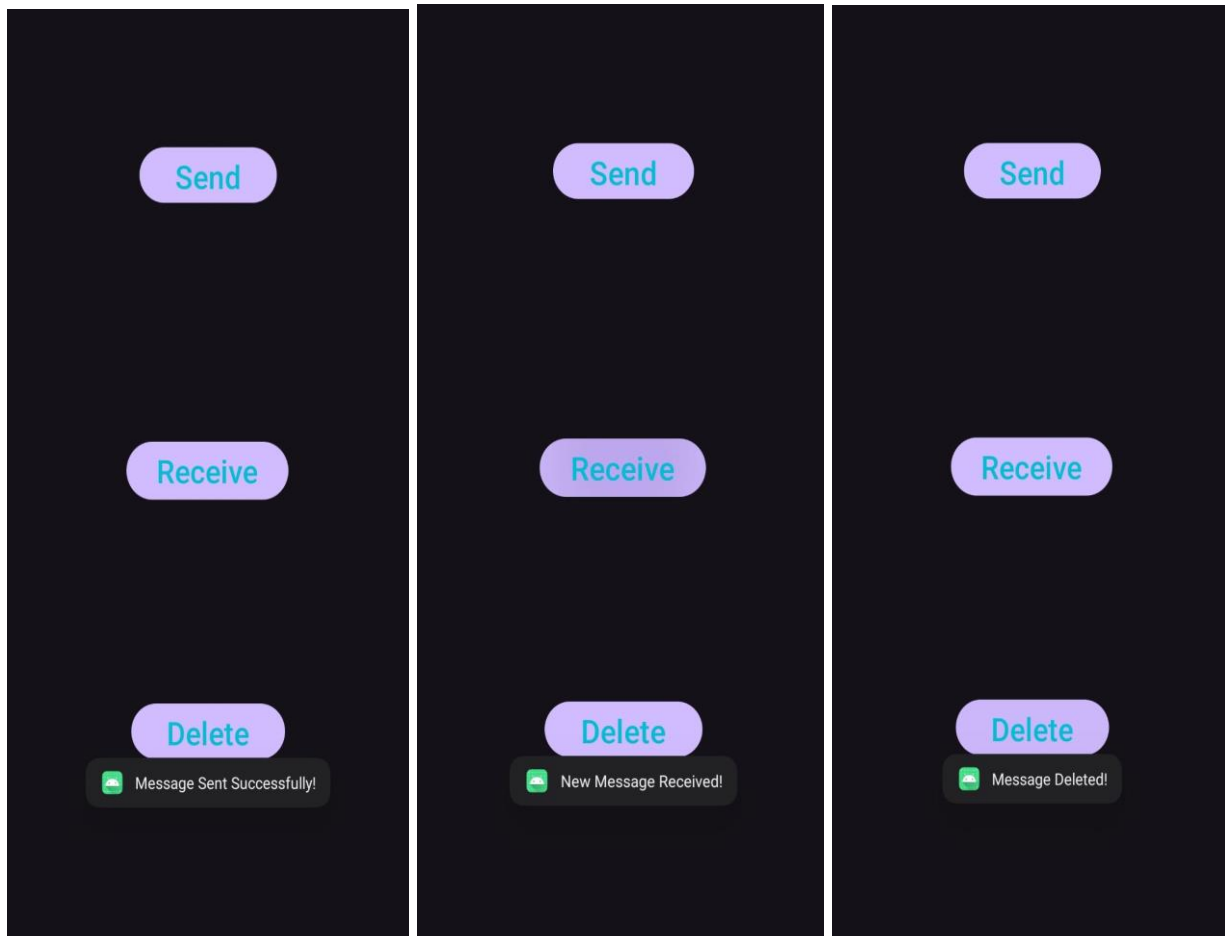
app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toBottomOf="@+id/ReceiveBtn"

tools:ignore="MissingConstraints" />

</androidx.constraintlayout.widget.ConstraintLayout>

Output:

Practical 3:

Working with Views and ViewGroups. (3 layout, FYIT, SYIT and TYIT. Use Color.xml, String.xml)

Code: