

Code:1**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:background="#00BCD5"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/tv1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:text="Hello World!"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/btn1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="152dp"
        android:drawableTop="@android:drawable/button_onoff_indicator_on"
        android:drawableTint="#A59A3F"
        android:hyphenationFrequency="none"
        android:text="Hello"
        android:textColor="#FF9800"
        android:textColorHint="#00BCD4"
        android:textColorLink="#88912D"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

Main.java:

```

package com.example.demoapplication;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;

```

```

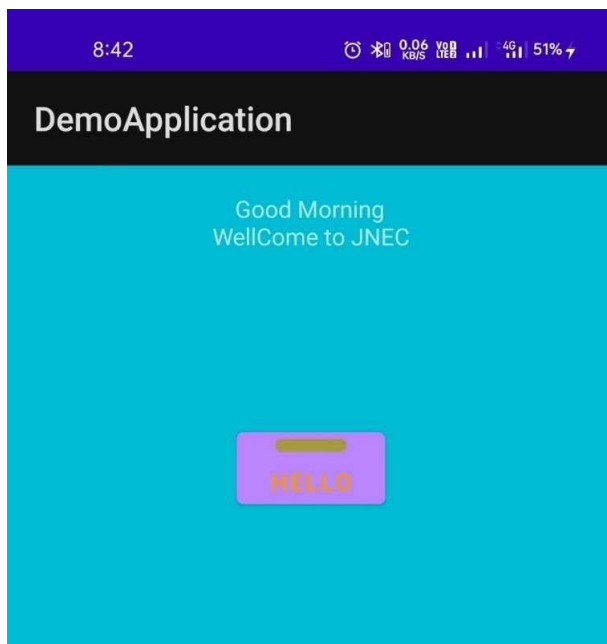
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    TextView t;
    Button b;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        t= findViewById(R.id.tv1);
        b=findViewById(R.id.btn1);

        b.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                t.setText("\t\tGood Morning \nWellCome to JNEC");
            }
        });
    }
}

```

Output:

Code:2

```
<?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">
```

```
<TextView
    android:id="@+id/textView5"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Regular (Special)"
    android:textColor="@android:color/holo_blue_dark"
    android:textSize="16sp"
    tools:layout_editor_absoluteX="61dp"
    tools:layout_editor_absoluteY="354dp" />
```

```
<TextView
    android:id="@+id/textView4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Regular (Normal)"
    android:textColor="@android:color/holo_blue_dark"
    android:textSize="16sp"
    tools:layout_editor_absoluteX="52dp"
    tools:layout_editor_absoluteY="306dp" />
```

```
<TextView
    android:id="@+id/Menu"
    android:layout_width="63dp"
    android:layout_height="44dp"
    android:text="Menu"
    android:textColor="@android:color/holo_red_dark"
    android:textSize="24sp"
    android:visibility="visible"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.048" />
```

```
<ImageView
    android:id="@+id/imageView"
```

```
android:layout_width="0dp"  
android:layout_height="0dp"  
app:srcCompat="@drawable/chicken_tikka" />
```

```
<TextView  
    android:id="@+id/Chikan_Tikka"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Chikan_Tikka"  
    android:textColor="@android:color/holo_blue_dark"  
    android:textSize="16sp"  
    tools:layout_editor_absoluteX="80dp"  
    tools:layout_editor_absoluteY="139dp" />
```

```
<ImageView  
    android:id="@+id/imageView2"  
    android:layout_width="0dp"  
    android:layout_height="0dp"  
    app:srcCompat="@drawable/gulab_jamun" />
```

```
<TextView  
    android:id="@+id/textView2"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Gulab Jamun"  
    android:textColor="@android:color/holo_blue_bright"  
    android:textSize="16sp"  
    tools:layout_editor_absoluteX="80dp"  
    tools:layout_editor_absoluteY="194dp" />
```

```
<TextView  
    android:id="@+id/textView3"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Pav_Bhaji"  
    android:textColor="@android:color/holo_blue_dark"  
    android:textSize="16sp"  
    tools:layout_editor_absoluteX="105dp"  
    tools:layout_editor_absoluteY="253dp" />
```

```
<CheckBox  
    android:id="@+id/checkbox1"  
    android:layout_width="46dp"  
    android:layout_height="22dp"  
    android:text="ADD"  
    app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintStart_toEndOf="@+id/Chikan_Tikka"
tools:layout_editor_absoluteY="139dp" />
```

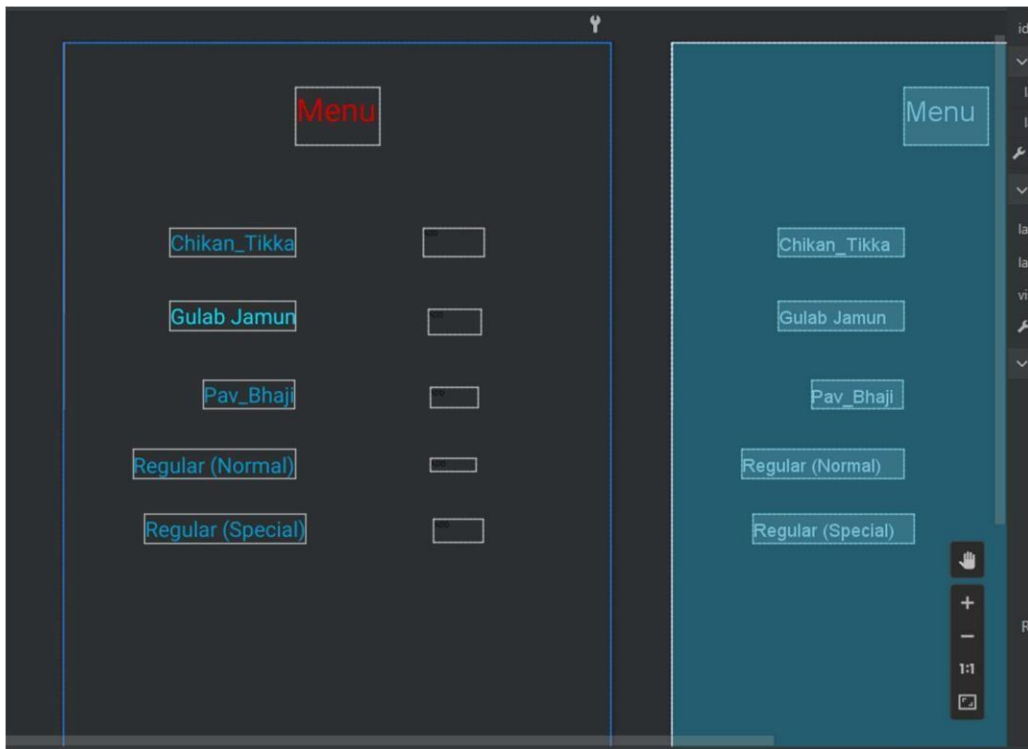
```
<CheckBox
    android:id="@+id/checkBox2"
    android:layout_width="39dp"
    android:layout_height="19dp"
    android:text="ADD"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView2"
    tools:layout_editor_absoluteY="200dp" />
```

```
<CheckBox
    android:id="@+id/checkBox3"
    android:layout_width="36dp"
    android:layout_height="15dp"
    android:text="ADD"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView3"
    tools:layout_editor_absoluteY="259dp" />
```

```
<CheckBox
    android:id="@+id/checkBox4"
    android:layout_width="34dp"
    android:layout_height="10dp"
    android:text="ADD"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView4"
    tools:layout_editor_absoluteY="312dp" />
```

```
<CheckBox
    android:id="@+id/checkBox5"
    android:layout_width="37dp"
    android:layout_height="17dp"
    android:text="ADD"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView5"
    tools:layout_editor_absoluteY="358dp" />
```

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



Code:3**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">

    <EditText
        android:id="@+id/et2"
        android:layout_width="233dp"
        android:layout_height="0dp"
        android:layout_marginBottom="23dp"
        android:ems="10"
        android:hint="Enter 2nd value"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toTopOf="@+id/btnAdd"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/et1" />

    <EditText
        android:id="@+id/et1"
        android:layout_width="237dp"
        android:layout_height="0dp"
        android:layout_marginTop="48dp"
        android:layout_marginBottom="11dp"
        android:ems="10"
        android:hint="Enter 1st value"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toTopOf="@+id/et2"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/btnAdd"
        android:layout_width="0dp"
        android:layout_height="0dp"
        android:layout_marginEnd="67dp"
        android:layout_marginBottom="9dp"
        android:text="ADD"

```

```

app:layout_constraintBottom_toTopOf="@+id/btndiv"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toEndOf="@+id/btnsub"
app:layout_constraintTop_toBottomOf="@+id/et2" />

```

```

<TextView
    android:id="@+id/tvans"
    android:layout_width="117dp"
    android:layout_height="0dp"
    android:layout_marginEnd="62dp"
    android:layout_marginBottom="314dp"
    android:text="TextView"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="@+id/btndiv"
    app:layout_constraintTop_toBottomOf="@+id/btndiv" />

```

```

<Button
    android:id="@+id/btnsub"
    android:layout_width="0dp"
    android:layout_height="53dp"
    android:layout_marginStart="91dp"
    android:layout_marginTop="77dp"
    android:layout_marginEnd="51dp"
    android:layout_marginBottom="72dp"
    android:text="Sub"
    app:layout_constraintBottom_toBottomOf="@+id/btnmulti"
    app:layout_constraintEnd_toStartOf="@+id/btnAdd"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="@+id/et2" />

```

```

<Button
    android:id="@+id/btnmulti"
    android:layout_width="0dp"
    android:layout_height="59dp"
    android:layout_marginStart="91dp"
    android:layout_marginTop="9dp"
    android:layout_marginEnd="45dp"
    android:text="MUL"
    app:layout_constraintEnd_toStartOf="@+id/btndiv"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/btnAdd" />

```

```

<Button
    android:id="@+id/btndiv"
    android:layout_width="0dp"
    android:layout_height="0dp"

```



```

    android:layout_marginEnd="61dp"
    android:layout_marginBottom="48dp"
    android:text="DIV"
    app:layout_constraintBottom_toTopOf="@+id/tvans"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/btnmulti"
    app:layout_constraintTop_toBottomOf="@+id/btnAdd" />

```

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

Main.java:

```
package com.example.myapplication;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```

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

```

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

```

    EditText e1,e2;
    TextView t1;
    Button badd,bsub,bmulti,bdiv;
    int a,b,c;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        e1 = findViewById(R.id.et1);
        e2 = findViewById(R.id.et2);
        t1 = findViewById(R.id.tvans);
        badd = findViewById(R.id.btnAdd);
        bsub = findViewById(R.id.btnsub);
        bmulti = findViewById(R.id.btnmulti);
        bdiv = findViewById(R.id.btndiv);

```

```

        badd.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                a = Integer.parseInt(e1.getText().toString());
                b = Integer.parseInt(e2.getText().toString());

```

```

        c=a+b;
        t1.setText(""+c);

        Toast t= Toast.makeText(MainActivity.this, "Addition"+c,
Toast.LENGTH_SHORT);
        t.setGravity(Gravity.CENTER,0,0);
        t.show();

    }

});
bsub.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        a = Integer.parseInt(e1.getText().toString());
        b = Integer.parseInt(e2.getText().toString());
        c=a-b;
        t1.setText(""+c);

        Toast t= Toast.makeText(MainActivity.this, "Substraction"+c,
Toast.LENGTH_SHORT);
        t.setGravity(Gravity.CENTER,0,0);
        t.show();

    }

});
bmulti.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        a = Integer.parseInt(e1.getText().toString());
        b = Integer.parseInt(e2.getText().toString());
        c=a*b;
        t1.setText(""+c);

        Toast t= Toast.makeText(MainActivity.this, "Multiplication"+c,
Toast.LENGTH_SHORT);
        t.setGravity(Gravity.CENTER,0,0);
        t.show();

    }

});

```

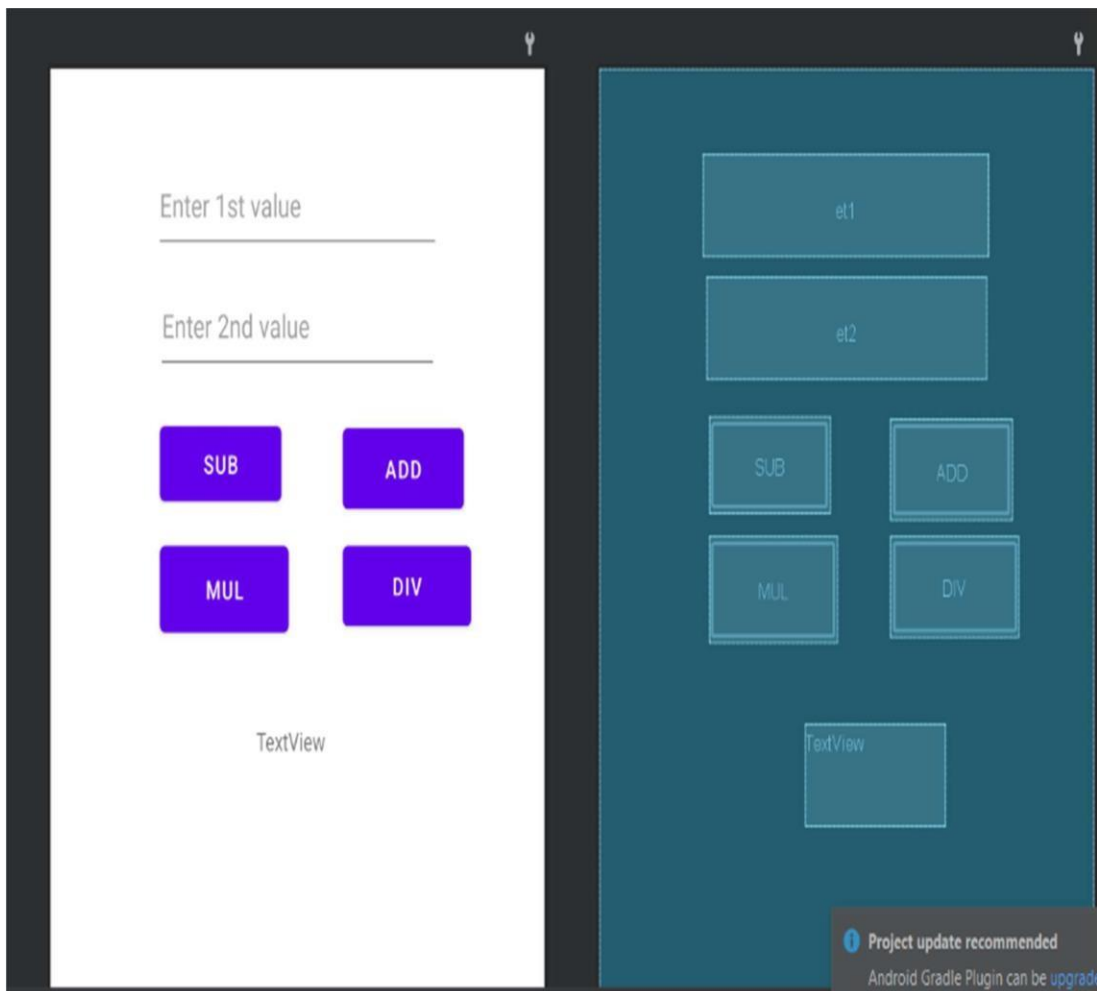
```

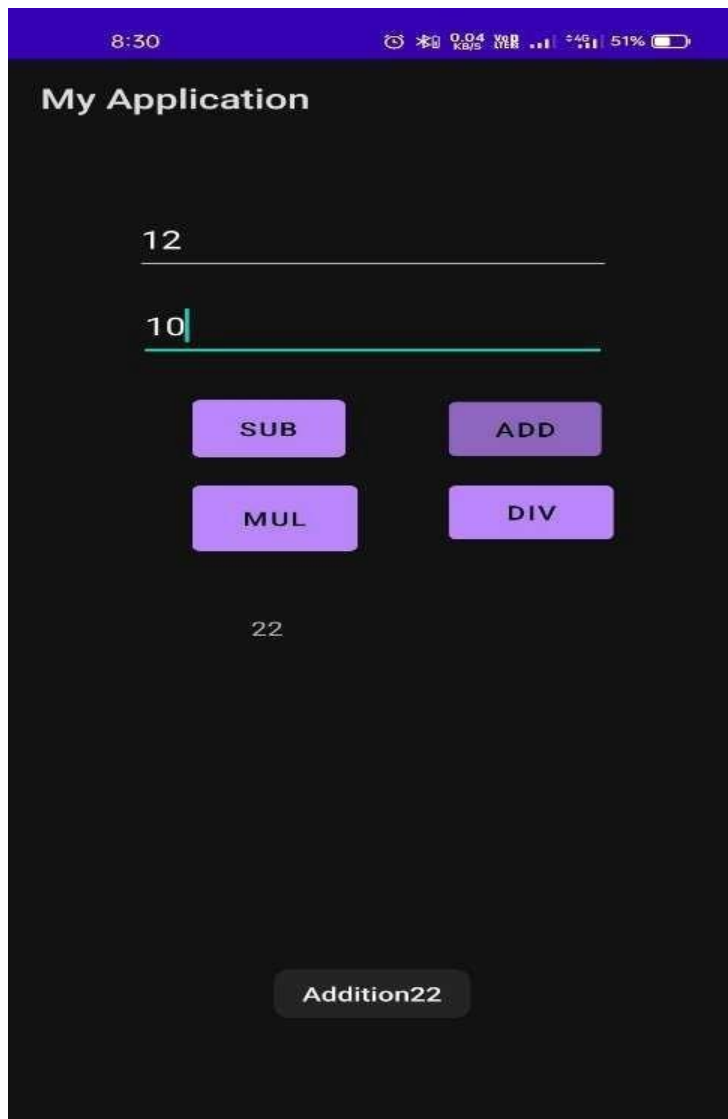
bdiv.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        a = Integer.parseInt(e1.getText().toString());
        b = Integer.parseInt(e2.getText().toString());
        c=a/b;
        t1.setText(""+c);

        Toast t= Toast.makeText(MainActivity.this, "Division"+c,
Toast.LENGTH_SHORT);
        t.setGravity(Gravity.CENTER,0,0);
        t.show();    }

    });  }
}

```





Code:4**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">

    <EditText
        android:id="@+id/etPhone"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="34dp"
        android:ems="10"
        android:hint="phone"
        android:inputType="phone"
        android:minHeight="48dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/btnCall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginEnd="1dp"
        android:layout_marginBottom="13dp"
        android:onClick="callelick"
        android:text="Call"
        app:layout_constraintBottom_toTopOf="@+id/btnGoogle"
        app:layout_constraintEnd_toEndOf="@+id/btnGoogle" />

    <Button
        android:id="@+id/btnGoogle"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="5dp"
        android:layout_marginBottom="24dp"
        android:onClick="googleclick"
        android:text="Google"
        app:layout_constraintBottom_toTopOf="@+id/btnMap"

```

```

        app:layout_constraintStart_toStartOf="@+id/btnmsg" />

<Button
    android:id="@+id/btnMap"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="6dp"
    android:layout_marginBottom="23dp"
    android:onClick="mapclick"
    android:text="Map"
    app:layout_constraintBottom_toTopOf="@+id/btnmsg"
    app:layout_constraintStart_toStartOf="@+id/btnmsg" />

<Button
    android:id="@+id/btnmsg"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="308dp"
    android:onClick="smsclick"
    android:text="SMS"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent" />

<EditText
    android:id="@+id/etsms"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="type text"
    android:inputType="textPersonName"
    tools:layout_editor_absoluteX="101dp"
    tools:layout_editor_absoluteY="97dp" />

</androidx.constraintlayout.widget.ConstraintLayout

```

Main.java:

```

package com.example.demodialgoogle;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.telephony.SmsManager;

```

```

import android.view.View;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    EditText inphone;
    EditText insms;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        inphone = findViewById(R.id.etPhone);
    }

    public void callclick(View view) {
        String phoneNo = inphone.getText().toString();
        Intent i = new Intent(Intent.ACTION_DIAL);
        i.setData(Uri.parse("tel:+91"+phoneNo));
        startActivity(i);
    }

    public void googleclick(View view) {

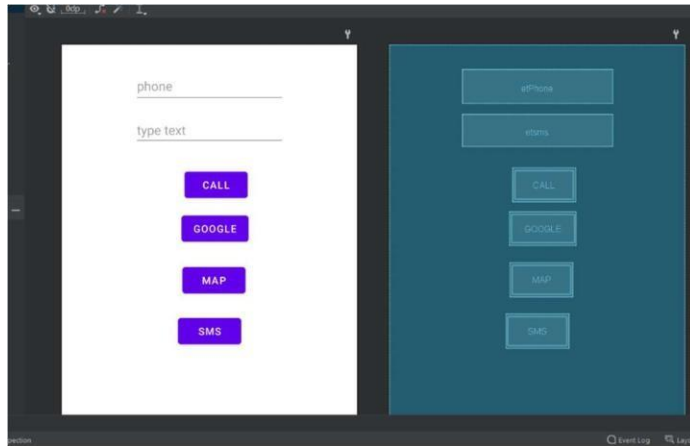
        Intent i = new Intent(Intent.ACTION_VIEW);
        i.setData(Uri.parse("https://www.google.com/"));
        startActivity(i);
    }

    public void mapclick(View view) {
        Intent i = new Intent(Intent.ACTION_VIEW);
        i.setData(Uri.parse("geo:19.8786655,75.3557075"));
        startActivity(i);
    }

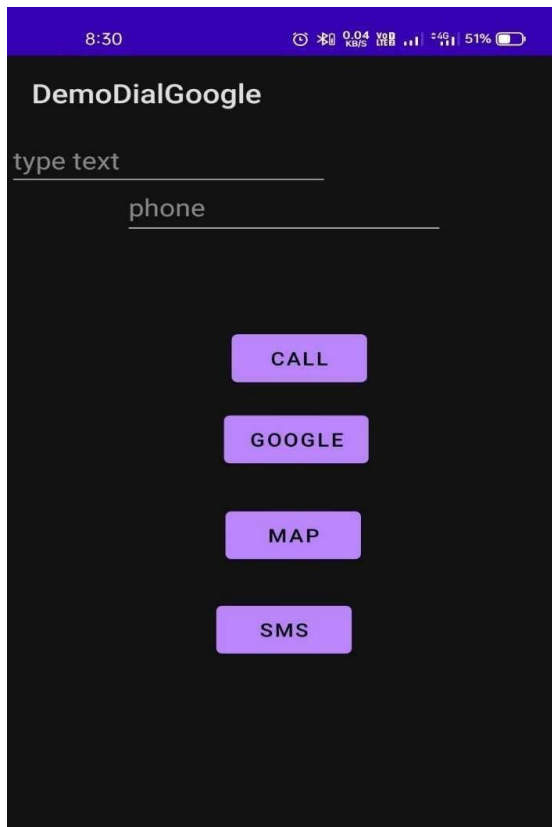
    public void smsclick(View view) {
        SmsManager sms = SmsManager.getDefault();
        sms.sendTextMessage(inphone.getText().toString(), null, "hello", null, null);
        Toast.makeText(MainActivity.this, "SMS Successfull!",
Toast.LENGTH_SHORT).show();
    }
}

```

Design:



In Mobile:



Code:5**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/imgv1"
        android:layout_width="0dp"
        android:layout_height="0dp"
        android:layout_marginStart="75dp"
        android:layout_marginTop="95dp"
        android:layout_marginEnd="75dp"
        android:layout_marginBottom="83dp"
        app:layout_constraintBottom_toTopOf="@+id/cambtn"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        tools:srcCompat="@tools:sample/avatars" />

    <Button
        android:id="@+id/cambtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="125dp"
        android:onClick="captureimage"
        android:text="Camera"
        app:layout_constraintBottom_toTopOf="@+id/btnstop"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/imgv1" />

    <Button
        android:id="@+id/btnplay"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="10dp"
        android:layout_marginEnd="1dp"
        android:layout_marginBottom="132dp"

```

```

        android:onClick="playmusic"
        android:text="Play"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toStartOf="@+id/btnpause"
        app:layout_constraintStart_toStartOf="parent" />

<Button
    android:id="@+id/btnpause"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:onClick="pausemusic"
    android:text="paues"
    app:layout_constraintBaseline_toBaselineOf="@+id/btnstop"
    app:layout_constraintEnd_toStartOf="@+id/btnstop"
    app:layout_constraintStart_toEndOf="@+id/btnplay" />

<Button
    android:id="@+id/btnstop"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="12dp"
    android:layout_marginBottom="132dp"
    android:onClick="stopmusic"
    android:text="stop"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/btnpause"
    app:layout_constraintTop_toBottomOf="@+id/cambtn" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

Main.java:

```

package com.example.camera;

import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.graphics.Bitmap;
import android.media.MediaParser;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.provider.MediaStore;
import android.view.View;
import android.widget.ImageView;

```

```
public class MainActivity extends AppCompatActivity {

    ImageView img;
    MediaPlayer mp;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        img = findViewById(R.id.imgv1);
        mp = MediaPlayer.create(MainActivity.this,R.raw.realme);
    }

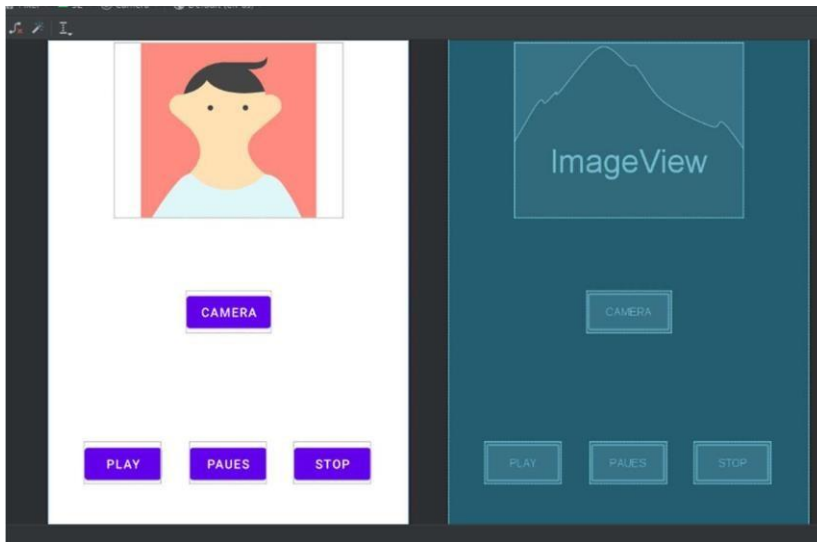
    public void captureimage(View view) {
        Intent i = new Intent(MediaStore.ACTION_IMAGE_CAPTURE);
        startActivityForResult(i,0);
    }

    @Override
    protected void onActivityResult(int requestCode, int resultCode, Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        Bitmap b = (Bitmap) data.getExtras().get("data");
        img.setImageBitmap(b);
    }

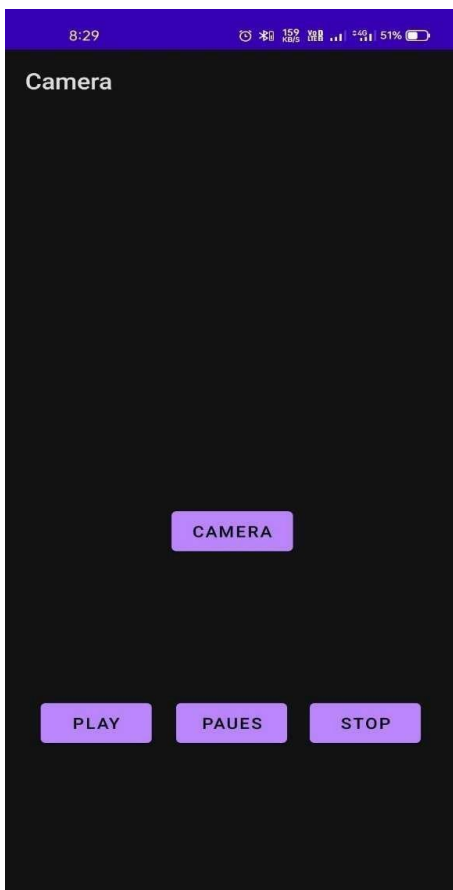
    public void playmusic(View view) {
        mp.start();
    }

    public void pausemusic(View view) {
        mp.pause();
    }

    public void stopmusic(View view) {
        mp.stop();
        mp = MediaPlayer.create(MainActivity.this,R.raw.realme);
    }
}
```



Mobile Screen:



Code:6**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">

    <FrameLayout
        android:layout_width="417dp"
        android:layout_height="727dp"
        tools:layout_editor_absoluteX="1dp"
        tools:layout_editor_absoluteY="3dp">

        <VideoView
            android:id="@+id/videoV"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content" />
        </FrameLayout>

    </androidx.constraintlayout.widget.ConstraintLayout>

```

Main.java

```

package com.example.video;

import androidx.appcompat.app.AppCompatActivity;

import android.net.Uri;
import android.os.Bundle;
import android.widget.MediaController;
import android.widget.VideoView;

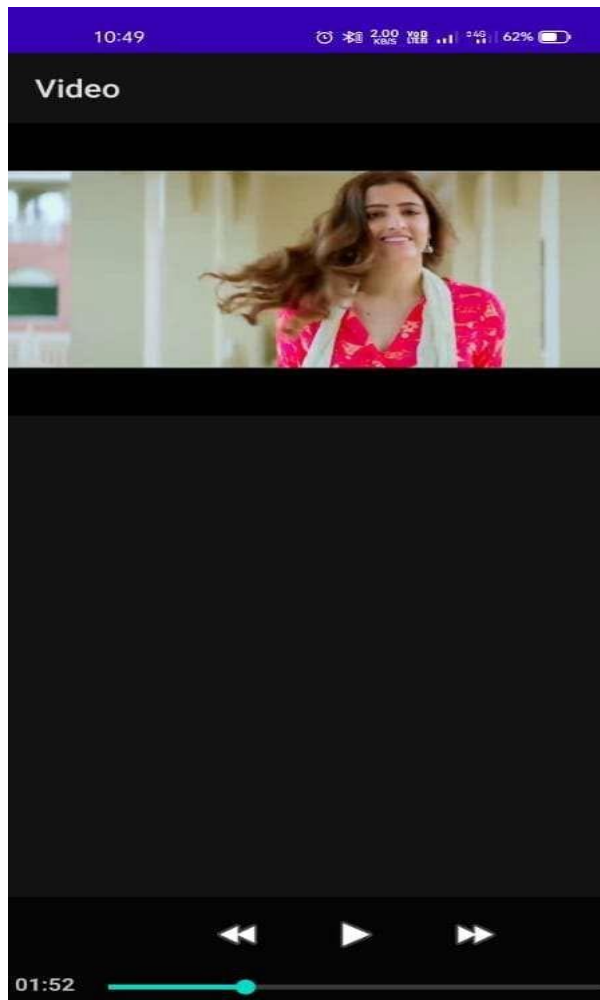
public class MainActivity extends AppCompatActivity {

    VideoView vv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        vv=findViewById(R.id.videoV);
        String videopath= "android.resource://" +getPackageName()+ "/" +R.raw.akshay;
        Uri url=Uri.parse(videopath);
    }
}

```

```
vv.setVideoURI(url);

MediaController mdc = new MediaController(MainActivity.this);
vv.setMediaController(mdc);
mdc.setAnchorView(vv);
}
}
```



Code:7**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/imgv1"
        android:layout_width="0dp"
        android:layout_height="0dp"
        android:layout_marginStart="75dp"
        android:layout_marginTop="95dp"
        android:layout_marginEnd="75dp"
        android:layout_marginBottom="83dp"
        app:layout_constraintBottom_toTopOf="@+id/cambtn"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        tools:srcCompat="@tools:sample/avatars" />

    <Button
        android:id="@+id/cambtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="125dp"
        android:onClick="captureimage"
        android:text="Camera"
        app:layout_constraintBottom_toTopOf="@+id/btnstop"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/imgv1" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

Main.java:

```

package com.example.camera;

import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;

```

```
import android.content.Intent;
import android.graphics.Bitmap;
import android.media.MediaParser;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.provider.MediaStore;
import android.view.View;
import android.widget.ImageView;

public class MainActivity extends AppCompatActivity {

    ImageView img;
    MediaPlayer mp;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        img = findViewById(R.id.imgv1);
        mp = MediaPlayer.create(MainActivity.this,R.raw.realme);
    }

    public void captureimage(View view) {
        Intent i = new Intent(MediaStore.ACTION_IMAGE_CAPTURE);
        startActivityForResult(i,0);
    }

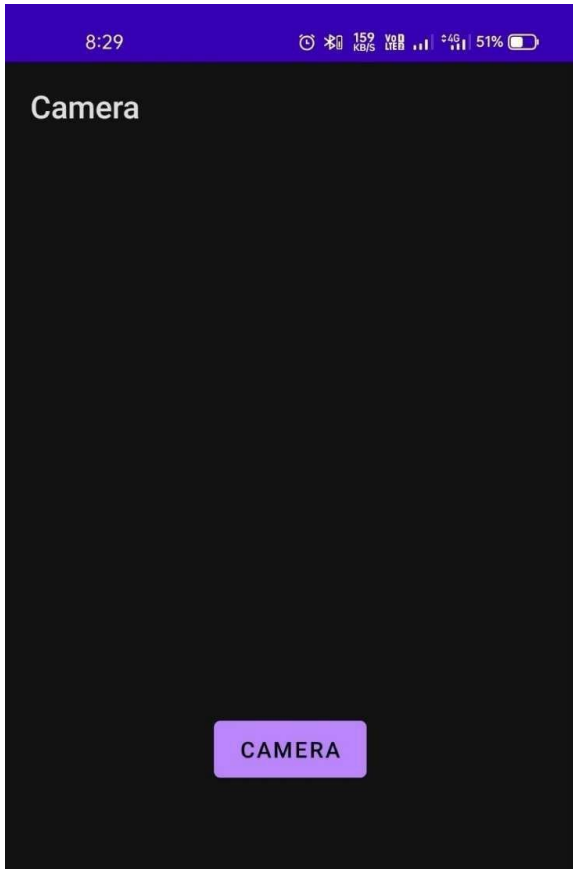
    @Override
    protected void onActivityResult(int requestCode, int resultCode, Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        Bitmap b = (Bitmap) data.getExtras().get("data");
        img.setImageBitmap(b);
    }

    public void playmusic(View view) {
        mp.start();
    }

    public void pausemusic(View view) {
        mp.pause();
    }

    public void stopmusic(View view) {
        mp.stop();
        mp = MediaPlayer.create(MainActivity.this,R.raw.realme);
    }
}
```


}
}



CODE:8**Mainactivity.java**

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.demodialgoogle">

    <uses-permission android:name="android.permission.SEND_SMS"/>

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.DemoDialGoogle">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>

```

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">
    <Button
        android:id="@+id/btnmsg"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="308dp"
        android:onClick="smsclick"
        android:text="SMS"
    >

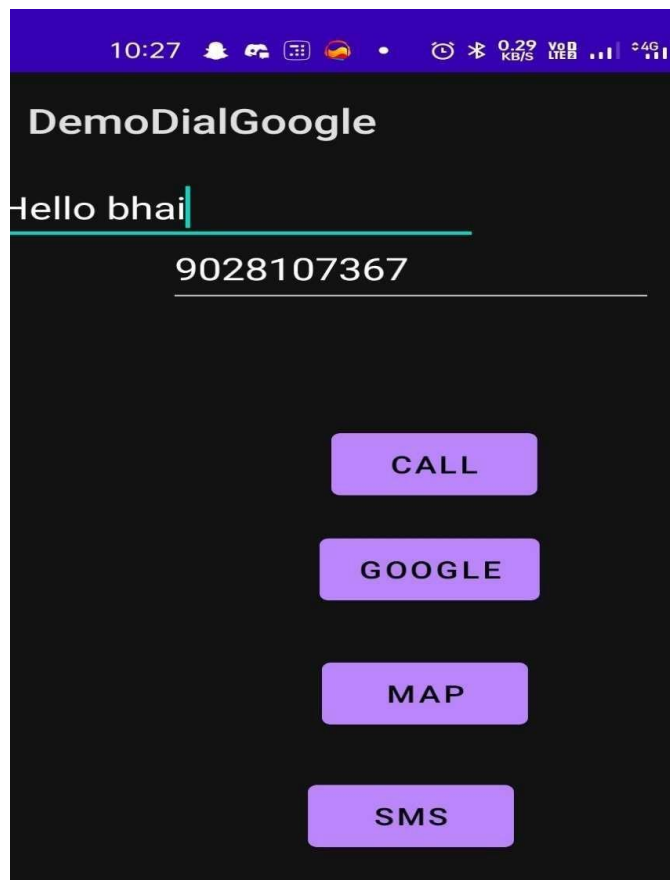
```

```
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent" />

<EditText
    android:id="@+id/etsms"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="type text"
    android:inputType="textPersonName"
    tools:layout_editor_absoluteX="101dp"
    tools:layout_editor_absoluteY="97dp" />

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

Click on SMS:



Code:9**Activity_main.xml**

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

<LinearLayout

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"

android:orientation="vertical"

android:layout_margin="30dp"

tools:context=".MainActivity">

<EditText

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:id="@+id/Text"

android:layout_marginBottom="20dp"

android:hint="Enter Any Sentence"

android:gravity="center"

android:textSize="16dp"/>

<Button

android:layout_width="wrap_content"

android:id="@+id/btnText"

android:layout_height="wrap_content"

android:text="Click Here"

android:layout_gravity="center"/>

<TextView

android:id="@+id/textView"

android:layout_width="match_parent"

android:layout_height="wrap_content"
```

```

android:layout_marginTop="70dp"
android:gravity="center_horizontal"
android:text="Enter your Message"
android:textColor="@android:color/holo_green_dark"
android:textSize="36sp" />
</LinearLayout>

```

MainActivity.java

```

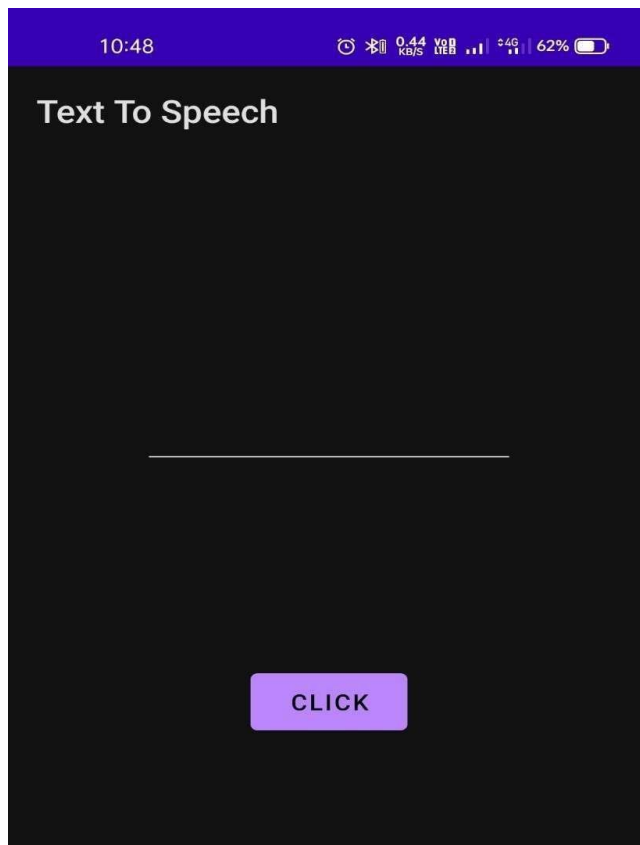
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.speech.tts.TextToSpeech;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import java.util.Locale;

public class MainActivity extends AppCompatActivity {
    EditText Text;
    Button btnText;
    TextToSpeech textToSpeech;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Text = findViewById(R.id.Text);
        btnText = findViewById(R.id.btnText);
        textToSpeech = new TextToSpeech(getApplicationContext(), new
        TextToSpeech.OnInitListener() {
            @Override
            public void onInit(int i) {
                if(i!=TextToSpeech.ERROR){

```

```
textToSpeech.setLanguage(Locale.UK);  
}  
}  
});  
btnText.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View view) {  
        textToSpeech.speak(Text.getText().toString(),TextToSpeech.QUEUE_FLUSH,null);  
    }  
});  
}  
}
```



Code:10**Mainactivity.java**

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.demodialgoogle">
    <uses-permission android:name="android.permission.CALL_PHONE"/>
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.DemoDialGoogle">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>

```

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">

    <EditText
        android:id="@+id/etPhone"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="34dp"
        android:ems="10"

```

```

        android:hint="phone"
        android:inputType="phone"
        android:minHeight="48dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

<Button
    android:id="@+id/btnCall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="1dp"
    android:layout_marginBottom="13dp"
    android:onClick="callclick"
    android:text="Call"
    app:layout_constraintBottom_toTopOf="@+id/btnGoogle"
    app:layout_constraintEnd_toEndOf="@+id/btnGoogle" />
</androidx.constraintlayout.widget.ConstraintLayout

```

Mobile Screen:

