PROGRAM 1: VISITCARD

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  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/textView"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout alignParentRight="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="17dp"
    android:layout_marginLeft="17dp"
    android:layout_marginTop="17dp"
    android:layout marginEnd="168dp"
    android:layout marginRight="168dp"
    android:layout_marginBottom="498dp"
    android:text="SSIT"
    android:textSize="38dp" />
  <ImageView
    android:id="@+id/imageView"
    android:layout_width="290dp"
    android:layout_height="174dp"
    android:layout alignParentEnd="true"
    android:layout_alignParentRight="true"
    android:layout_alignParentBottom="true"
    android:layout marginEnd="-26dp"
    android:layout_marginRight="-26dp"
    android:layout_marginBottom="517dp"
    app:srcCompat="@drawable/ssit" />
  <View
    android:id="@+id/view"
    android:layout_width="wrap_content"
    android:layout_height="4dp"
    android:layout alignParentBottom="true"
    android:layout_marginBottom="483dp"
    android:background="#4444" />
```

<TextView

android:id="@+id/textView2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentRight="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="131dp"
android:layout_marginRight="131dp"
android:layout_marginBottom="420dp"
android:text="Subhash C S"
android:textSize="30dp"
android:textStyle="bold" />

<TextView

android:id="@+id/textView3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentRight="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="80dp"
android:layout_marginRight="80dp"
android:layout_marginBottom="379dp"
android:text="Assistant Professor-ISE"
android:textSize="25dp"/>

<TextView

android:id="@+id/textView4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentRight="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="129dp"
android:layout_marginRight="129dp"
android:layout_marginBottom="342dp"
android:text="Ph No: 9988776655"
android:textSize="20dp" />

<TextView

android:id="@+id/textView5"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentRight="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="89dp"

```
android:layout_marginRight="89dp"
    android:layout marginBottom="300dp"
    android:text="SSIT,TUMAKURU,572105"
    android:textSize="20dp" />
  <TextView
    android:id="@+id/textView6"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentRight="true"
    android:layout alignParentBottom="true"
    android:layout_marginEnd="75dp"
    android:layout_marginRight="75dp"
    android:layout marginBottom="262dp"
    android:text="Email: subhashcs@ssit.edu.in"
    android:textSize="20dp" />
</RelativeLayout>
```

MainActivity.java

```
package com.example.visit;
```

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

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



PROGRAM 2: SIMPLE CALCULATOR

Activity main.xml

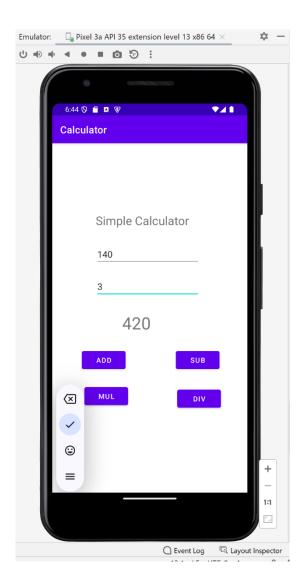
```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  tools:context=".MainActivity">
  <TextView
    android:id="@+id/textView"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout alignParentBottom="true"
    android:layout_marginEnd="117dp"
    android:layout_marginBottom="532dp"
    android:text="Simple Calculator"
    android:textSize="24sp" />
  <EditText
    android:id="@+id/editText1"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:layout_alignParentEnd="true"
    android:layout alignParentBottom="true"
    android:layout marginEnd="95dp"
    android:layout_marginBottom="457dp"
    android:ems="10"
    android:hint="Enter the Number1"
    android:inputType="textPersonName"
    android:text=""/>
  <EditText
    android:id="@+id/editText2"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout alignParentEnd="true"
    android:layout alignParentBottom="true"
    android:layout_marginEnd="95dp"
    android:layout_marginBottom="392dp"
    android:ems="10"
    android:hint="Enter the Number2"
    android:inputType="textPersonName"
    android:text=""/>
```

```
<TextView
  android:id="@+id/textView1"
  android:layout_width="129dp"
  android:layout height="wrap content"
  android:layout alignParentEnd="true"
  android:layout_alignParentBottom="true"
  android:layout_marginEnd="123dp"
  android:layout_marginBottom="319dp"
  android:text="0"
  android:textSize="34sp" />
<Button
  android:id="@+id/button"
  android:layout width="wrap content"
  android:layout_height="wrap_content"
  android:layout alignParentEnd="true"
  android:layout_alignParentBottom="true"
  android:layout_marginEnd="245dp"
  android:layout_marginBottom="243dp"
  android:onClick="add"
  android:text="ADD" />
<Button
  android:id="@+id/button2"
  android:layout_width="wrap_content"
  android:layout height="wrap content"
  android:layout_alignParentEnd="true"
  android:layout_alignParentBottom="true"
  android:layout marginEnd="56dp"
  android:layout_marginBottom="243dp"
  android:onClick="sub"
  android:text="SUB" />
<Button
  android:id="@+id/button3"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout alignParentEnd="true"
  android:layout_alignParentBottom="true"
  android:layout_marginEnd="240dp"
  android:layout marginBottom="170dp"
  android:onClick="mul"
  android:text="MUL" />
<Button
  android:id="@+id/button4"
  android:layout width="wrap content"
```

```
android:layout_height="wrap_content"
    android:layout alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="53dp"
    android:layout marginBottom="165dp"
    android:onClick="div"
    android:text="DIV" />
</RelativeLayout>
```

```
MainActivity.java
package com.example.calculator;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
  EditText e1,e2;
  TextView tv1;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    e1=(EditText)findViewById(R.id.editText1);
    e2=(EditText)findViewById(R.id.editText2);
    tv1=(TextView)findViewById(R.id.textView1);
  }
  public void add(View view){
    int a1 = Integer.parseInt(e1.getText().toString());
    int a2 = Integer.parseInt(e2.getText().toString());
    int result= a1+a2;
    tv1.setText(""+result);
  }
  public void sub(View view){
    int a1 = Integer.parseInt(e1.getText().toString());
    int a2 = Integer.parseInt(e2.getText().toString());
    int result= a1-a2;
    tv1.setText(""+result);
  }
  public void mul(View view){
    int a1 = Integer.parseInt(e1.getText().toString());
    int a2 = Integer.parseInt(e2.getText().toString());
    int result= a1*a2;
```

```
tv1.setText(""+result);
}
public void div(View view){
  int a1 = Integer.parseInt(e1.getText().toString());
  int a2 = Integer.parseInt(e2.getText().toString());
  float result= a1/a2;
  tv1.setText(""+result);
}
```



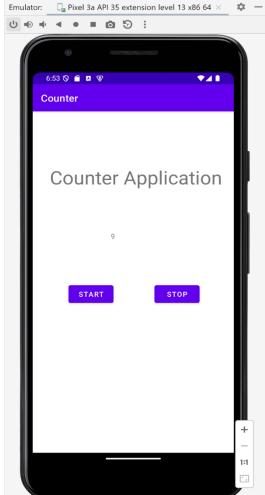
PROGRAM 3: COUNTER APPLICATION

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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:layout_width="378dp"
    android:layout_height="68dp"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="18dp"
    android:layout_marginBottom="602dp"
    android:text="Counter Application"
    android:textSize="38dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout constraintTop toTopOf="parent" />
  <TextView
    android:id="@+id/textView"
    android:layout width="121dp"
    android:layout_height="32dp"
    android:layout alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="145dp"
    android:layout_marginBottom="478dp"
    android:text="Counter Value" />
  <Button
```

```
android:id="@+id/btn_start"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout alignParentBottom="true"
    android:layout_marginEnd="297dp"
    android:layout marginBottom="295dp"
    android:text="Start" />
  <Button
    android:id="@+id/btn stop"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout alignParentEnd="true"
    android:layout alignParentBottom="true"
    android:layout_marginEnd="74dp"
    android:layout marginBottom="292dp"
    android:text="Stop" />
</RelativeLayout>
MainActivity.java
package com.example.counter;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.os.Handler;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
  Button btnstart, btnstop;
  TextView txtcounter;
  int i=1:
  Handler customHandler=new Handler();
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    btnstart=findViewById(R.id.btn start);
    btnstop=findViewById(R.id.btn_stop);
```

```
txtcounter=findViewById(R.id.textView);
  btnstart.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
      customHandler.postDelayed(updateTimerThread,0);
    }
  });
  btnstop.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
      customHandler.removeCallbacks(updateTimerThread);
    }
  });
}
private final Runnable updateTimerThread=new Runnable() {
  @Override
  public void run() {
    txtcounter.setText(""+i);
    customHandler.postDelayed(this,1000);
    i++;
  }
};
```



PROGRAM 4: TEXT-TO-SPEECH

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  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/textView"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentRight="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="53dp"
    android:layout_marginRight="53dp"
    android:layout_marginBottom="537dp"
    android:text="Text2SpeechApp"
    android:textSize="40dp" />
  <EditText
    android:id="@+id/editText"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:layout alignParentEnd="true"
    android:layout_alignParentRight="true"
    android:layout_alignParentBottom="true"
    android:layout marginEnd="101dp"
    android:layout_marginRight="101dp"
    android:layout_marginBottom="383dp"
    android:ems="10"
    android:hint="Enter the text to be converted"
    android:inputType="textPersonName"
    android:text=""/>
  <Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout alignParentEnd="true"
    android:layout_alignParentRight="true"
    android:layout alignParentBottom="true"
    android:layout marginEnd="154dp"
```

```
android:layout_marginRight="154dp"
android:layout_marginBottom="256dp"
android:onClick="convert"
android:text="Convert" />
</RelativeLayout>
```

MainActivity.java

```
package com.example.texttospeech;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.speech.tts.TextToSpeech;
import android.view.View;
import android.widget.EditText;
import android.widget.Toast;
import java.util.Locale;
public class MainActivity extends AppCompatActivity {
  TextToSpeech t1;
  EditText e1;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    e1 = findViewById(R.id.editText);
    t1 = new TextToSpeech(getApplicationContext(), new
        TextToSpeech.OnInitListener() {
          @Override
          public void onInit(int status) {
             if (status!=TextToSpeech.ERROR){
               t1.setLanguage(Locale.UK);
             }
          }
        });
  }
  public void convert(View view){
    String tospeak = e1.getText().toString();
    t1.speak(tospeak,TextToSpeech.QUEUE_FLUSH,null);
  }
}
```

