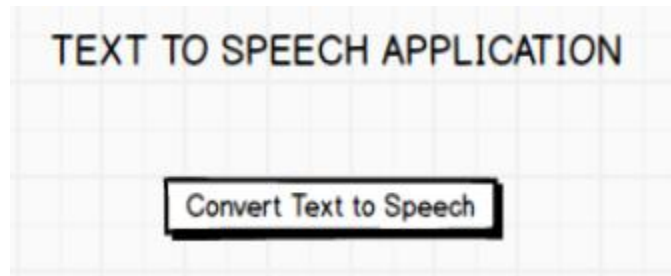**Program 7:**

Develop a simple application with one EditText so that the user can write some text in it. Create a button called "Convert Text to Speech" that converts the user input text into voice.


```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">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Text to Speech Application"
        android:textAlignment="center"
        android:textColor="#9C27B0"
        android:textSize="24sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.495"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.058" />

    <EditText
        android:id="@+id/editTextTextPersonName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.557"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.177" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="SPEECH"
        app:layout_constraintBottom_toBottomOf="parent"
```

```xml
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.33" />

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

```java
package com.example.lab7;
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 android.widget.Toast;
import java.util.Locale;

public class MainActivity extends AppCompatActivity implements
View.OnClickListener, TextToSpeech.OnInitListener {
Button btn;
EditText txt;
TextToSpeech txttospeech;
    @Override
     protected void onCreate(Bundle savedInstanceState) {
         super.onCreate(savedInstanceState);
         setContentView(R.layout.activity_main);
         txt=(EditText) findViewById(R.id.editTextTextPersonName);
         btn=(Button) findViewById(R.id.button);
         btn.setOnClickListener(this);
         txttospeech=new TextToSpeech(getBaseContext(),this);
         txttospeech.setLanguage(Locale.ENGLISH);

    }

    @Override
    public void onClick(View view){
        String text=txt.getText().toString();
        txttospeech.speak(text,TextToSpeech.QUEUE_FLUSH,null);//Synthesizes
speech from text for immediate playback or to create a sound file.

    }

    @Override
    public void onInit(int i) {
        if(i!=TextToSpeech.ERROR)

Toast.makeText(getBaseContext(),"Success",Toast.LENGTH_LONG).show();
    }
}
```

Output: