# Experiment-7:

Develop a simple application with one Edit Text 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.

# Program:

**activity\_main.xml:**

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

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android)

xmlns:app="[http://schemas.android.com/apk/res-auto"](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">

<EditText android:id="@+id/e"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="88dp" android:ems="10" android:hint="Name" android:inputType="text"

app:layout\_constraintBottom\_toTopOf="@+id/button"

app:layout\_constraintVertical\_bias="0.678" />

<Button

android:id="@+id/button" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginBottom="320dp" android:text="Button" android:onClick="convert"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintStart\_toStartOf="parent" />

<TextView android:id="@+id/textView" android:layout\_width="354dp" android:layout\_height="56dp"

android:text="TEXT to SPEECH APP" android:textAlignment="center" android:textSize="34sp" app:layout\_constraintBottom\_toTopOf="@+id/e"

app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.491" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.51" />

</androidx.constraintlayout.widget.ConstraintLayout>

# MainActivity.java:

package com.example.myapplication; import android.os.Bundle;

import android.speech.tts.TextToSpeech; import android.view.View;

import android.widget.EditText; import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity; import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat; import java.util.Locale;

/\*\* @noinspection deprecation\*/

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.e);

t1 = new TextToSpeech(getApplicationContext(), new TextToSpeech.OnInitListener() {

@Override

public void onInit(int status) {

if (status!=TextToSpeech.ERROR)

{

t1.setLanguage(Locale.ENGLISH);

}

}

});

}

public void convert(View V){

String tospeak = e1.getText().toString(); t1.speak(tospeak,TextToSpeech.QUEUE\_FLUSH,null);

} }