

### **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"

    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">

    <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_constraintEnd_toEndOf="parent"

app:layout_constraintHorizontal_bias="0.497"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent"

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_FLU

    SH,null);

} }
```