MAD LABS:

**Prog 1: Create an application to design a Visiting Card. The Visiting card should have a company logo at the top right corner. The company name should be displayed in Capital letters, aligned to the centre. Information like the name of the employee, job title, phone number, address, email, fax and the website address are to be displayed. Insert a horizontal line between the job title and the phone number.**

**PROGRAM**

<?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"

android:background="#FFFFFF"

tools:context=".MainActivity">

<TextView

android:id="@+id/textView4"

android:layout\_width="371dp"

android:layout\_height="wrap\_content"

android:layout\_alignParentStart="true"

android:layout\_alignParentLeft="true"

android:layout\_alignParentEnd="true"

android:layout\_alignParentRight="true"

android:layout\_alignParentBottom="true"

android:layout\_marginStart="28dp"

android:layout\_marginLeft="28dp"

android:layout\_marginEnd="12dp"

android:layout\_marginRight="12dp"

android:layout\_marginBottom="219dp"

android:text="Address: Amrita School of Computing, Bogadi 2nd Stage, Mysuru"

android:textAlignment="center"

android:textSize="24sp" />

<TextView

android:id="@+id/textView5"

android:layout\_width="250dp"

android:layout\_height="wrap\_content"

android:layout\_alignParentStart="true"

android:layout\_alignParentLeft="true"

android:layout\_alignParentEnd="true"

android:layout\_alignParentRight="true"

android:layout\_alignParentBottom="true"

android:layout\_marginStart="87dp"

android:layout\_marginLeft="87dp"

android:layout\_marginEnd="73dp"

android:layout\_marginRight="73dp"

android:layout\_marginBottom="157dp"

android:text="Ph No: 9717620165"

android:textAlignment="center"

android:textSize="24sp" />

<TextView

android:id="@+id/textView6"

android:layout\_width="367dp"

android:layout\_height="wrap\_content"

android:layout\_alignParentStart="true"

android:layout\_alignParentLeft="true"

android:layout\_alignParentEnd="true"

android:layout\_alignParentRight="true"

android:layout\_alignParentBottom="true"

android:layout\_marginStart="25dp"

android:layout\_marginLeft="25dp"

android:layout\_marginEnd="19dp"

android:layout\_marginRight="19dp"

android:layout\_marginBottom="64dp"

android:text="Email Id: ssin.mca@gmail.com"

android:textAlignment="center"

android:textSize="24sp" />

<TextView

android:id="@+id/textView3"

android:layout\_width="367dp"

android:layout\_height="66dp"

android:layout\_alignParentStart="true"

android:layout\_alignParentLeft="true"

android:layout\_alignParentEnd="true"

android:layout\_alignParentRight="true"

android:layout\_alignParentBottom="true"

android:layout\_marginStart="32dp"

android:layout\_marginLeft="32dp"

android:layout\_marginEnd="12dp"

android:layout\_marginRight="12dp"

android:layout\_marginBottom="287dp"

android:text="Assistant Professor-Amrita"

android:textAlignment="center"

android:textSize="24sp" />

<ImageView

android:id="@+id/imageView1"

android:layout\_width="155dp"

android:layout\_height="298dp"

app:srcCompat="@drawable/amrita1"

android:layout\_above="@+id/textView2"

android:layout\_alignRight="@+id/textView6"

android:layout\_alignEnd="@+id/textView6" />

<View android:id="@+id/view"

android:layout\_width="wrap\_content"

android:layout\_height="4dp"

android:layout\_alignParentBottom="true"

android:layout\_marginBottom="457dp"

android:background="#4444" />

<TextView

android:id="@+id/textView2"

android:layout\_width="176dp"

android:layout\_height="wrap\_content"

android:layout\_alignParentStart="true"

android:layout\_alignParentLeft="true"

android:layout\_alignParentEnd="true"

android:layout\_alignParentRight="true"

android:layout\_alignParentBottom="true"

android:layout\_marginStart="95dp"

android:layout\_marginLeft="95dp"

android:layout\_marginEnd="140dp"

android:layout\_marginRight="140dp"

android:layout\_marginBottom="401dp"

android:text="Somnath Sinha"

android:textAlignment="center"

android:textSize="24sp"

android:textStyle="bold" />

<TextView

android:id="@+id/textView1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="AMRITA" android:textColor="#E91E63"

android:textSize="36sp"

android:textStyle="bold"

android:layout\_alignBottom="@+id/view"

android:layout\_alignLeft="@+id/textView6"

android:layout\_alignStart="@+id/textView6" />

</RelativeLayout>

**Prog2: Develop an Android application using controls like Button, TextView, EditText for designing a calculator having basic functionality like Addition, Subtraction, Multiplication, and Division.**

**PROGRAM**

<?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="209dp" android:layout\_height="60dp"

android:layout\_alignParentEnd="true" android:layout\_alignParentRight="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="108dp" android:layout\_marginRight="108dp"

android:layout\_marginBottom="530dp" android:text="Simple Calci" android:textSize="36sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintLeft\_toLeftOf="parent" app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<EditText

android:id="@+id/editText2" 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="115dp" android:layout\_marginRight="115dp"

android:layout\_marginBottom="364dp" android:ems="10"

android:hint="Enter the Number 2" android:inputType="textPersonName" android:text=""

android:textColorHighlight="#FFFFFF" />

<EditText

android:id="@+id/editText1" 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="110dp" android:layout\_marginRight="110dp"

android:layout\_marginBottom="439dp" android:ems="10"

android:hint="Enter the Number 1" android:inputType="textPersonName" android:text=""

android:textColorHighlight="#FFFFFF" />

<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="260dp"

android:layout\_marginRight="260dp" android:layout\_marginBottom="175dp"

android:text="ADD" android:textStyle="bold" android:onClick="add"

app:backgroundTint="#E8F381" />

<Button

android:id="@+id/button3" 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="266dp" android:layout\_marginRight="266dp"

android:layout\_marginBottom="61dp" android:text="MUL" android:onClick="mul"

app:backgroundTint="#A1FAA4" />

<Button

android:id="@+id/button4" 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="108dp" android:layout\_marginRight="108dp"

android:layout\_marginBottom="63dp" android:text="DIV" android:onClick="div"

app:backgroundTint="#E6C28C" />

<Button

android:id="@+id/button2" 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="105dp" android:layout\_marginRight="105dp"

android:layout\_marginBottom="182dp" android:text="SUB" android:onClick="sub"

app:backgroundTint="#ECA9A9" />

<TextView

android:id="@+id/tv1" android:layout\_width="86dp" android:layout\_height="61dp"

android:layout\_alignParentEnd="true" android:layout\_alignParentRight="true"

android:layout\_alignParentBottom="true" android:layout\_marginEnd="202dp"

android:layout\_marginRight="202dp" android:layout\_marginBottom="274dp" android:text="0"

android:textSize="36sp" />

</RelativeLayout>

JAVA-CODE

import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText; import android.widget.TextView;

public class MainActivity extends AppCompatActivity { EditText e1,e2;

TextView tv;

@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); tv=

(TextView)findViewById(R.id.tv1);

}

public void add(View v){

int a1=Integer.parseInt(e1.getText().toString()); int a2= Integer.parseInt(e2.getText().toString());

int result=a1+a2;

tv.setText(""+result); }

public void sub(View v){

int a1=Integer.parseInt(e1.getText().toString()); int a2= Integer.parseInt(e2.getText().toString());

int result=a1-a2;

tv.setText(""+result);

}

public void mul(View v){

int a1=Integer.parseInt(e1.getText().toString()); int a2= Integer.parseInt(e2.getText().toString());

int result=a1\*a2;

tv.setText(""+result);

}

public void div(View v){

float a1=Integer.parseInt(e1.getText().toString()); float a2=

Integer.parseInt(e2.getText().toString()); float result=a1/a2;

tv.setText(""+result);

}}

**Prog3:Develop an application to set an image as wallpaper. On click of a button, the wallpaper image should start to change randomly every 30 seconds.**

**PROGRAM**

XML-CODE

<?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">

<Button android:id="@+id/button1"

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="167dp"

android:layout\_marginRight="167dp"

android:layout\_marginBottom="409dp"

android:text="CLICK HERE" />

</RelativeLayout>

JAVA-CODE

package com.example.wallpaperchangeapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.app.WallpaperManager;

import android.graphics.Bitmap;

import android.graphics.BitmapFactory;

import android.graphics.drawable.BitmapDrawable;

import android.graphics.drawable.Drawable;

import android.os.Bundle;

import android.os.Handler;

import android.view.View;

import android.widget.Button;

import android.widget.Toast;

import java.io.IOException;

import java.util.Timer;

import java.util.TimerTask;

public class MainActivity extends AppCompatActivity

{

Button wallpaperChange;

Timer mytimer;

Drawable drawable;

WallpaperManager wpm;

int prev=1;

@Override

protected void onCreate(Bundle savedInstanceState)

{

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

mytimer=new Timer();

wpm = WallpaperManager.getInstance(this);

wallpaperChange=(Button)findViewById(R.id.button1);

wallpaperChange.setOnClickListener(new View.OnClickListener()

{

@Override public void onClick(View view)

{ setwallpaper();

}

});

}

private void setwallpaper()

{

Toast.makeText(this,"setting Wallpaper please wait.",Toast.LENGTH\_LONG).show();

mytimer.schedule(new TimerTask()

{

@Override public void run()

{

if(prev==1)

{

drawable = getResources().getDrawable(R.drawable.i1);

prev = 2;

}

else if(prev==2)

{

drawable = getResources().getDrawable(R.drawable.i2); prev=3;

}

else if(prev==3)

{ drawable = getResources().getDrawable(R.drawable.i3);

prev=4;

}

else if(prev==4)

{

drawable = getResources().getDrawable(R.drawable.i4);

prev=5;

}

else if(prev==5)

{

drawable = getResources().getDrawable(R.drawable.i5);

prev=1;

}

Bitmap wallpaper = ((BitmapDrawable)drawable).getBitmap();

Try

{

wpm.setBitmap(wallpaper);

}

catch (IOException e)

{

e.printStackTrace();

}

}

},0,30000);

}

}

**Prog4: Develop an Android app to count the total number of clicks of a button. On each click, a toast message "hurrah!" is displayed as well as the total number of clicks in the text view.**

**PROGRAM**

XML-Code

<?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/textView1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Hello World!"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<Button

android:id="@+id/button1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Click"

app:layout\_constraintBottom\_toTopOf="@+id/textView1"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

JAVA-CODE

package com.example.newtoast;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

int count = 0;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Button b = (Button) findViewById(R.id.button1);

TextView t = (TextView) findViewById(R.id.textView1);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Toast.makeText(MainActivity.this,

"Hurrah!!",

Toast.LENGTH\_SHORT).show();

count++;

t.setText("Button is clicked " + count + " times.");

}

});

}

}

**Prog5: Write a program to create an activity with two buttons START and STOP. On pressing START, the activity must start the counter by displaying the numbers from One and the counter must keep on counting until the STOP button is pressed. Display the counter value in a TextViewControl.**

**PROGRAM:**

**XML-Code**

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

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TextView android:id="@+id/textView1"

android:layout\_width="332dp"

android:layout\_height="wrap\_content"

android:layout\_alignParentStart="true"

android:layout\_alignParentLeft="true"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginStart="41dp"

android:layout\_marginLeft="41dp"

android:layout\_marginRight="38dp"

android:layout\_marginBottom="516dp"

android:text="Counter Application"

android:textSize="36sp"

android:textStyle="bold" />

<Button

android:id="@+id/button1"

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="41dp"

android:layout\_marginRight="38dp"

android:layout\_marginBottom="89dp"

android:text="Start"

android:textSize="30sp"

app:backgroundTint="4CAF50"/>

<Button

android:id="@+id/button2"

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="55dp"

android:layout\_marginRight="55dp"

android:layout\_marginBottom="92dp"

android:text="Stop"

android:textSize="30sp"

app:backgroundTint="EC5449"/>

<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="165"

android:layout\_marginRight="165dp"

android:layout\_marginBottom="434dp"

android:text="counter value"

android:textSize=”18sp" android:textStyle="bold"/>

</RelativeLayout>

Java Code:

package com.example.counterapplication;

import android.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{

TextView txtCounter;

Button btn=start, btn\_stop;

int count=0;

Handler customHandler= new Handler();

@Override

protected void onCreate(Bundle savedInstanceState){

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

txtCounter=(TextView) findViewById(R.id.textView2);

btn\_start=(Button) findViewById(R.id.button1);

btn\_stop=(Button)findViewById(R.id.button2);

btn.start.setOnClickListener(new view.OnClickListener()){

@Override

public void onClick(View v){

customHandler.removeCallbacks(updateTimerThread);

});

btn\_stop.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(""+count);

customHandler.postDelayed(this,1000);

count++;

}};

**Prog6: Develop a simple application with one EditText so that the user can write some text in it. Create a button called text in it. Create a button called "Convert Text to Speech" that converts the user input into voice.**

<?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="Welcome to MAD LABS"

android:textColor="@android:color/holo\_green\_dark"

android:textSize="36sp" />

</LinearLayout>

JAVACODE

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){

// To Choose language of speech

textToSpeech.setLanguage(Locale.UK);

}

}

});

btnText.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

textToSpeech.speak(Text.getText().toString(),TextToSpeech.QUEUE\_FLUSH,null);

}

});

}

}

**Database**

Xml code

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

<LinearLayout

xmlns:android="http://schemas.android.com/apk/res/

android"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

tools:context=".MainActivity">

<!--Edit text to enter course name-->

<EditText

android:id="@+id/idEdtCourseName"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:hint="Enter course Name" />

<!--edit text to enter course duration-->

<EditText

android:id="@+id/idEdtCourseDuration"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:hint="Enter Course Duration" />

<!--edit text to display course tracks-->

<EditText

android:id="@+id/idEdtCourseTracks"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:hint="Enter Course Tracks" />

<!--edit text for course description-->

<EditText

android:id="@+id/idEdtCourseDescription"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:hint="Enter Course Description" />

<!--button for adding new course-->

<Button

android:id="@+id/idBtnAddCourse"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:text="Add Course"

android:textAllCaps="false" />

</LinearLayout>

Db handler

package com.example.database;  
  
import android.content.ContentValues;  
import android.content.Context;  
import android.database.sqlite.SQLiteDatabase;  
import android.database.sqlite.SQLiteOpenHelper;  
public class DBHandler extends SQLiteOpenHelper {  
  
  
 private static final String *DB\_NAME* = "coursedb";  
 private static final int *DB\_VERSION* = 1;  
 private static final String *TABLE\_NAME* = "mycourses";  
 private static final String *ID\_COL* = "id";  
 private static final String *NAME\_COL* = "name";  
 private static final String *DURATION\_COL* = "duration";  
 private static final String *DESCRIPTION\_COL* = "description";  
 private static final String *TRACKS\_COL* = "tracks";  
 public DBHandler(Context context) {  
 super(context, *DB\_NAME*, null, *DB\_VERSION*);  
 }  
 @Override  
 public void onCreate(SQLiteDatabase db) {  
 String query = "CREATE TABLE " + *TABLE\_NAME* + "("  
 + *ID\_COL* + " INTEGER PRIMARY KEY AUTOINCREMENT, "  
 + *NAME\_COL* + " TEXT,"  
 + *DURATION\_COL* + " TEXT,"  
 + *DESCRIPTION\_COL* + " TEXT,"  
 + *TRACKS\_COL* + " TEXT)";  
 db.execSQL(query);  
 }  
 public void addNewCourse(String courseName, String courseDuration, String courseDescription, String courseTracks)  
 {  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues values = new ContentValues();  
 values.put(*NAME\_COL*, courseName);  
 values.put(*DURATION\_COL*, courseDuration);  
 values.put(*DESCRIPTION\_COL*, courseDescription);  
 values.put(*TRACKS\_COL*, courseTracks);  
 db.insert(*TABLE\_NAME*, null, values);  
 db.close();  
 }  
 @Override  
 public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {  
 db.execSQL("DROP TABLE IF EXISTS " + *TABLE\_NAME*);  
 onCreate(db);  
 }  
}

main activity

package com.example.database;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
import androidx.appcompat.app.AppCompatActivity;  
public class MainActivity extends AppCompatActivity {  
 private EditText courseNameEdt, courseTracksEdt,courseDurationEdt, courseDescriptionEdt;  
 private Button addCourseBtn;  
 private DBHandler dbHandler;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 courseNameEdt = findViewById(R.id.*idEditCousreName*);  
 courseTracksEdt = findViewById(R.id.*idEditCousreTracks*);  
 courseDurationEdt = findViewById(R.id.*idEditCousreDuration*);  
 courseDescriptionEdt = findViewById(R.id.*idEditCousreDescription*);  
 addCourseBtn = findViewById(R.id.*idBtnAddCousre*);  
 dbHandler = new DBHandler(MainActivity.this);  
  
 addCourseBtn.setOnClickListener(new View.OnClickListener() {  
 @Override   
 public void onClick(View v) {  
 String courseName = courseNameEdt.getText().toString();  
 String courseTracks = courseTracksEdt.getText().toString();  
 String courseDuration = courseDurationEdt.getText().toString();  
 String courseDescription = courseDescriptionEdt.getText().toString();  
 if (courseName.isEmpty() && courseTracks.isEmpty() && courseDuration.isEmpty() && courseDescription.isEmpty()) {  
 Toast.*makeText*(MainActivity.this, "Please enter all the data..", Toast.*LENGTH\_SHORT*).show();  
 return;  
 }  
 dbHandler.addNewCourse(courseName, courseDuration, courseDescription, courseTracks);  
 Toast.*makeText*(MainActivity.this, "Course has been added.", Toast.*LENGTH\_SHORT*).show();  
 courseNameEdt.setText("");  
 courseDurationEdt.setText("");  
 courseTracksEdt.setText("");  
 courseDescriptionEdt.setText("");  
 }  
 });  
 }  
  
}