2. Mobile application to develop a simple calculator. Application to generate random colour on each button click. Application to change background colour using radio button.

Step1: Create New Project

Step2: In **activity_main.xml** create user interface.

Step3: in MainActivity.java implement operations to perform task.

```
public class MainActivity extends AppCompatActivity
{
   EditText fno,sno;
   Button add,sub,mul,div,rand_btn;
   TextView ans;
   RadioGroup grp;
@Override
protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        fno=findViewById(R.id.txt1);
        sno=findViewById(R.id.txt2);
        add=findViewById(R.id.btn1);
        sub=findViewById(R.id.btn2);
        mul=findViewById(R.id.btn3);
        div=findViewById(R.id.btn4);
        ans=findViewById(R.id.txtvw1);
        rand_btn=findViewById(R.id.rand_btn);
        grp=findViewById(R.id.grp);

add.setOnClickListener(new View.OnClickListener()
{
 @Override
 public void onClick(View view) {
 int t1,t2,Result;
 t1=Integer.parseInt(fno.getText().toString());
 t2=Integer.parseInt(sno.getText().toString());
 Result=t1+t2;
 ans.setText("Result:"+Result);
 }
 });

sub.setOnClickListener(new View.OnClickListener() {
@Override
 public void onClick(View view) {
 int t1,t2,Result;
 t1=Integer.parseInt(fno.getText().toString());
 t2=Integer.parseInt(sno.getText().toString());
 Result=t1-t2;
 ans.setText("Result:"+Result);
 }
 });
```

```
mul.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View view) {
int t1,t2,Result;
t1=Integer.parseInt(fno.getText().toString());
t2=Integer.parseInt(sno.getText().toString());
Result=t1*t2;
ans.setText("Result:"+Result);
}
});
div.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View view) {
int t1,t2,Result;
t1=Integer.parseInt(fno.getText().toString());
t2=Integer.parseInt(sno.getText().toString());
Result=t1/t2;
ans.setText("Result:"+Result);
}
});
```

```
rand_btn.setOnClickListener(new
View.OnClickListener() {
@Override
public void onClick(View view) {
Random random=new Random();
int color=
Color.argb(255,random.nextInt(256),random.nextInt(2
56),random.nextInt(256));
getWindow().getDecorView().setBackgroundColor(color
);
}
});
```

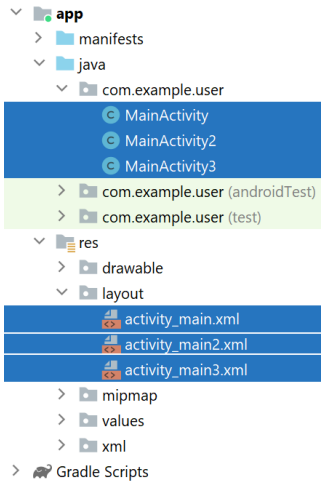
```
grp.setOnCheckedChangeListener(new
RadioGroup.OnCheckedChangeListener()
@Override
public void onCheckedChanged(RadioGroup radioGroup,
int i) {
        switch (i){
        case R.id.r1:
getWindow().getDecorView().setBackgroundColor(Color
.RED);
break;
case R.id.r2:
getWindow().getDecorView().setBackgroundColor(Color
.BLUE);
 break;
case R.id.r3:
getWindow().getDecorView().setBackgroundColor(Color
.GREEN);
Break;
}
}
});
}
}
```

Step4: In gradle scripts (project properties)->include below code->then click **sync now**->top of file

android.nonFinalResIds=false

3.Develop a mobile application to display user profiles with 3 UI activities using intents.

Step1: Create New Project



Step2: In **activity_main.xml** create user interface.

Step3: in **MainActivity.java** implement operations to perform task.

```
public class MainActivity extends AppCompatActivity
{
Button btn1;
   @Override
 protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        btn1=findViewById(R.id.button);
 btn1.setOnClickListener(new View.OnClickListener()
{
   @Override
   public void onClick(View view) {
Intent i=new
Intent(MainActivity.this,MainActivity2.class);
    startActivity(i);
   }
});
}
}
```

Step4: Create one more activity->right click into java->new->activity->Empty view activity.

In **activity_main1.xml** create user interface

in **MainActivity1.java** implement operations to perform task.

```
public class MainActivity2 extends
AppCompatActivity {
EditText name,email,mno,address;
Button view;

   @Override
 protected void onCreate(Bundle savedInstanceState)
{
       super.onCreate(savedInstanceState);
       EdgeToEdge.enable(this);
       setContentView(R.layout.activity_main2);
name=findViewById(R.id.editTextText);
email=findViewById(R.id.editTextTextEmailAddress);
mno=findViewById(R.id.editTextPhone);
address=findViewById(R.id.editTextTextMultiLine);
view=findViewById(R.id.button3);

 view.setOnClickListener(new View.OnClickListener()
{
           @Override
 public void onClick(View view) {
 Intent i1=new
Intent(MainActivity2.this,MainActivity3.class);

   String text = name.getText().toString();
   String email1= email.getText().toString();
   String addr=address.getText().toString();
              int
mobnum=Integer.parseInt(mno.getText().toString());
i1.putExtra("text", text);
i1.putExtra("email", email1);
i1.putExtra("mobile", mobnum);
i1.putExtra("address", addr);
startActivity(i1);
}
});
}
}
```

Step5: Create one more activity->right click into java->new->activity->Empty view activity..

In **activity_main2.xml** create user interface

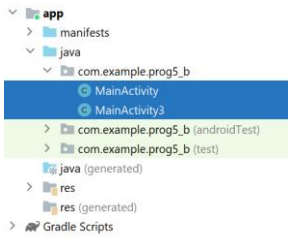
in **MainActivity2.java** implement operations to perform task.

```
public class MainActivity3 extends
AppCompatActivity {
TextView txt1,txt2,txt3,txt4;
Button home;
   @Override
protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main3);
        txt1=findViewById(R.id.textView2);
        txt2=findViewById(R.id.textView5);
        txt3=findViewById(R.id.textView4);
        txt4=findViewById(R.id.textView6);
        home=findViewById(R.id.button4);
   String text1=getIntent().getStringExtra("name");
   txt1.setText(text1);
  String text2=getIntent().getStringExtra("email");
  txt2.setText(text2);
 String text3=getIntent().getStringExtra("mobile");
  txt3.setText(text3);
String text4=getIntent().getStringExtra("address");
  txt4.setText(text4);

home.setOnClickListener(new View.OnClickListener()
{
          @Override
 public void onClick(View view) {
 Intent i2= new
Intent(MainActivity3.this,MainActivity.class);
  startActivity(i2);
 }
 });
}
}
```

5. Mobile Application to demonstrate the activity life cycle by logging the activities in the Logcat. Application to demonstrate interaction between activities.

Step1: Create New Project



Step2: In **activity_main.xml** create user interface.

Step3: in **MainActivity.java** implement operations to perform task.

```
public class MainActivity extends AppCompatActivity
{
EditText ed1;
Button send;
String tag ="Event";
 @Override
 protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);

        setContentView(R.layout.activity_main);
        Log.d(tag,"In the onCreate() event");
        ed1=findViewById(R.id.ed1);
        send=findViewById(R.id.button);

send.setOnClickListener(new View.OnClickListener()
{
            @Override
  public void onClick(View view) {
  String text = ed1.getText().toString();
  Intent intent = new Intent(MainActivity.this,
MainActivity3.class);
  intent.putExtra("text", text);
  startActivity(intent);
 }
 });

 }
```

```
public void onStart()
  {
      super.onStart();
      Log.d(tag, "In the onStart() event");
  }
  public void onRestart()
  {
      super.onRestart();
      Log.d(tag, "In the onRestart() event");
  }
  public void onResume()
  {
      super.onResume();
      Log.d(tag, "In the onResume() event");
  }
  public void onPause()
  {
      super.onPause();
      Log.d(tag, "In the onPause() event");
  }
    public void onStop()
    {
        super.onStop();
        Log.d(tag, "In the onStop() event");
    }
    public void onDestroy()
    {
        super.onDestroy();
        Log.d(tag, "In the onDestroy() event");
    }
 }
```

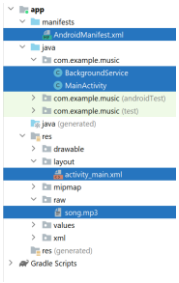
Step4: Create one more activity->right click into java->new->activity->Empty view activity.In **activity_main1.xml** create user interface

in **MainActivity1.java** implement operations to perform task.

```
public class MainActivity3 extends
AppCompatActivity {
TextView txt1;
Button btn1;

   @Override
 protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main3);
        txt1= findViewById(R.id.txt1);
  String text = getIntent().getStringExtra("text");
  txt1.setText(text);
  btn1=findViewById(R.id.back);
btn1.setOnClickListener(new View.OnClickListener()
{
          @Override
          public void onClick(View view) {
              Intent intent = new
Intent(MainActivity3.this, MainActivity.class);
              startActivity(intent);
  }
});
}
}
```

7.Implement a service to play music in background. Demonstrate sending of SMS, EMAIL, CALL using intents. Demonstrate usage of BROWSER and MAPs using intent class.



To implement a service to play music in background

Step1: Create New Project

Step2: In **activity_main.xml** create user interface.

Step3: in **MainActivity.java** implement operations to perform task.

```
public class MainActivity extends AppCompatActivity
{

   @Override
   protected void onCreate(Bundle
savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        Button btnstart,btnstop;
        btnstart=findViewById(R.id.startButton);
        btnstop=findViewById(R.id.stopButton);
        btnstart.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent i= new
Intent(MainActivity.this,BackgroundService.class);
                startService(i);
            }
            });
            '''
       btnstop.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent i=new
Intent(MainActivity.this,BackgroundService.class);
                stopService(i);
            }
        });

   }
```

Step4: create java class->right click into java->new->java class->name it as **BackgroundService**.[make sure java class is resides along with the **MainActivity** file.

```
public class BackgroundService extends Service {
    private MediaPlayer mediaPlayer;
    @Nullable
    @Override
    public IBinder onBind(Intent intent)
    {
        return null;
    }
    @Override
    public void onCreate() {
        super.onCreate();
        mediaPlayer =
MediaPlayer.create(this,R.raw.song );
        mediaPlayer.setLooping(true);
    }
    @Override
    public int onStartCommand(Intent intent,int
flag, int startId ) {
        mediaPlayer.start();
        return START_STICKY;
    }


 @Override
 public void onDestroy() {
     super.onDestroy();
     if (mediaPlayer != null) {
         mediaPlayer.stop();
         mediaPlayer.release();
     }
 }
}
```

Step5: : right click into **res** folder->new->android Resourse Directory->select resource type **raw.**

Step6: Rename music file[while renaming file use only small letter alphabets] and copy music to raw folder.

Step7: In Manifest.xml file register service.

```
        </activity>
        <service android:name=".BackgroundService"
android:enabled="true" android:exported="false"/>

    </application>

</manifest>
```

To implement a SMS, EMAIL, CALL, BROWSER, MAPS

Step1: Create New Project

Step2: In **activity_main.xml** create user interface.

Step3: in **MainActivity.java** implement operations to perform task.

```
public class MainActivity extends AppCompatActivity {
Button sendSmsButton;
   @SuppressLint("MissingInflatedId")
   @Override
   protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       EdgeToEdge.enable(this);
       setContentView(R.layout.activity_main);
   sendSmsButton = findViewById(R.id.smsbutton);
   sendSmsButton.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
           Intent smsIntent = new Intent(Intent.ACTION_SENDTO);
           smsIntent.setData(Uri.parse("smsto:" + "9945762542"));
           startActivity(smsIntent);
       }
   });

       Button callButton = findViewById(R.id.callButton);
       callButton.setOnClickListener(new View.OnClickListener() {
           @Override
           public void onClick(View v) {
               Intent callIntent = new Intent(Intent.ACTION_CALL);
               callIntent.setData(Uri.parse("tel:" + "9945762542"));
              startActivity(callIntent);
           }
       });
```

```
      Button emailButton = findViewById(R.id.emailButton);
      emailButton.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View v) {
              Intent emailIntent = new Intent(Intent.ACTION_SENDTO);

           emailIntent.setData(Uri.parse("mailto:"+"rakshithap@sjec.ac.in"));
           startActivity(emailIntent);
          }
      });

      Button openMapsButton = findViewById(R.id.button_open_maps);
      openMapsButton.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View v) {

              Uri mapuri= Uri.parse("geo:0,0?q= St. Joseph Engineering
College, Mangalore");
              Intent mapIntent = new Intent(Intent.ACTION_VIEW, mapuri);
              startActivity(mapIntent);
          }
      });

      Button openBrowserButton = findViewById(R.id.button_open_browser);
      openBrowserButton.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View v) {
              Uri uribro=Uri.parse("https://www.google.com");
              Intent browserIntent = new Intent(Intent.ACTION_VIEW, uribro);
              startActivity(browserIntent);
          }
      });
  }
  }
```

Application to insert data entered by user into database and display the values in database(using SQLIiteDatabase and DB Helper).

Step1: Create New Project

Step2: In **activity_main.xml** create user interface.

Step3: in **MainActivity.java** implement operations to perform task.

```
import android.database.Cursor;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;


import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;


public class MainActivity extends AppCompatActivity {
   Button insert,view;
   EditText name,mobile,address;
   MyDBHelper db;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       EdgeToEdge.enable(this);
       setContentView(R.layout.activity_main);
       insert=findViewById(R.id.buttonInsert);
       view=findViewById(R.id.buttonView);
       name=findViewById(R.id.name);
       mobile=findViewById(R.id.mobileno);
       address=findViewById(R.id.address);
       db=new MyDBHelper(this);
```

```
      insert.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View view) {
              String Username=name.getText().toString();
              String Usercon=mobile.getText().toString();
              String Useradd=address.getText().toString();
              Boolean checkinsert=db.insertdata(Username, Usercon, Useradd);
              if( checkinsert == true){
                  Toast.makeText(MainActivity.this,"User data
inserted",Toast.LENGTH_SHORT).show();
              }
              else
              {
                  Toast.makeText(MainActivity.this,"User data not
inserted",Toast.LENGTH_SHORT).show();
              }
          }
      });
```

```
      view.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View v) {
              Cursor res=db.getdata();
              if(res.getCount()==0){
                  Toast.makeText(MainActivity.this,"No Entry
exists",Toast.LENGTH_SHORT).show();
                   return;
              }
              StringBuffer buffer=new StringBuffer();
              while(res.moveToNext()){
                  buffer.append("Name:" +res.getString(0) +"\n");
                  buffer.append("Mobile:" +res.getString(1) +"\n");
                  buffer.append("Address:" +res.getString(2) +"\n");
              }
              AlertDialog.Builder builder=new
AlertDialog.Builder(MainActivity.this);
              builder.setCancelable(true);
              builder.setTitle("User Entries");
              builder.setMessage(buffer.toString());
              builder.show();
          }
      });
   }
}
```

Step4: create java class->right click into java->new ->java class->name it as **MyDBHelper**.[make sure java class is resides along with the **MainActivity** file.

After extending SQLiteOpenHelper need to **implement *onUpgrade* and *Oncreate* method and need to implement constructor *MyDBHelper* by right clicking** into ***public class MyDBHelper extends SQLiteOpenHelper***

```
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;


public class MyDBHelper extends SQLiteOpenHelper {
   private static final String DATABASE_NAME = "userdb.db";
   private static final int DATABASE_VERSION = 1;
   private static final String TABLE_NAME = "usertable";

   private static final String COLUMN_NAME = "name";
   private static final String COLUMN_NO = "mobile";
   private static final String COLUMN_CITY = "address";
```

```
   public MyDBHelper(Context context) {
       super(context, DATABASE_NAME, null, DATABASE_VERSION);
   }


   @Override
   public void onCreate(SQLiteDatabase db) {
       String CREATE_TABLE = " CREATE TABLE " + TABLE_NAME + " ( " +
COLUMN_NAME + " TEXT," + COLUMN_NO + " TEXT, " + COLUMN_CITY + " TEXT)";
       db.execSQL(CREATE_TABLE);
   }


   @Override
   public void onUpgrade(SQLiteDatabase db, int i, int i1) {
       db.execSQL("drop Table if exists usertable");
   }
```

```
   public boolean insertdata(String name, String mobile, String address) {
       SQLiteDatabase db= this.getWritableDatabase();
       ContentValues values=new ContentValues();
       values.put(COLUMN_NAME,name);
       values.put(COLUMN_NO,mobile);
       values.put(COLUMN_CITY,address);
       long result=db.insert(TABLE_NAME,null,values);
       if(result==-1)
       {
           return false;
       }
       else
       {
           return true;
       }
   }

   public Cursor getdata(){
       SQLiteDatabase db=this.getWritableDatabase();
       Cursor cursor=db.rawQuery("select * from usertable",null);
       return cursor;
   }
}
```

Step5: In Manifest.xml file give permission using **uses-permission** tag.

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:tools="http://schemas.android.com/tools">
<uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE"/>
   <application
```

11. Mobile Application to implement Android Graphics with different objects. Application to implement Android Animation -Fade,Rotate,Zoom,blink.

Step1: Create New Project

Step2: In **activity_main.xml** create user interface.

Step3: in **MainActivity.java** implement operations to perform task.

```
public class MainActivity extends AppCompatActivity
{
Button graphic,animation;
   @Override
 protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        graphic=findViewById(R.id.button5);
        animation=findViewById(R.id.button7);
 graphic.setOnClickListener(new
View.OnClickListener() {
           @Override
   public void onClick(View view) {
    Intent i=new
Intent(MainActivity.this, MainActivity2.class);
    startActivity(i);
           }
       });
animation.setOnClickListener(new
View.OnClickListener() {
          @Override
 public void onClick(View view) {
     Intent i1=new
Intent(MainActivity.this, MainActivity3.class);
   startActivity(i1);
          }
       });
   }
}
```

To perform Graphics

Step4: In **activity_main1.xml** create user interface.

Step5: in **MainActivity1.java** implement operations to perform task.

```
public class MainActivity3 extends
AppCompatActivity {

    ImageView img;
    Button rect, squ, cir, line;
    Bitmap bp;
    Canvas c;
    @Override
 protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        img = findViewById(R.id.imageView);
        rect = findViewById(R.id.button);
        squ = findViewById(R.id.button2);
        cir = findViewById(R.id.button3);
        line = findViewById(R.id.button4);
bp = Bitmap.createBitmap(520, 1200,
Bitmap.Config.ARGB_8888);
img.setImageBitmap(bp);
c = new Canvas(bp);

rect.setOnClickListener(new View.OnClickListener()
{
          @Override
          public void onClick(View view) {
              Paint p = new Paint();
              p.setColor(Color.BLUE);
              p.setTextSize(50);
              c.drawText("Rectangle", 10, 150, p);
              c.drawRect(30, 200, 200, 600, p);
          }
      });


 squ.setOnClickListener(new View.OnClickListener()
{
           @Override
           public void onClick(View view) {
               Paint p1 = new Paint();
               p1.setColor(Color.RED);
               p1.setTextSize(50);
               c.drawText("Square", 300, 150, p1);
               c.drawRect(250, 200, 480, 400, p1);
           }
       });
'
```

```
 cir.setOnClickListener(new View.OnClickListener()
{
           @Override
           public void onClick(View view) {
               Paint p2 = new Paint();
               p2.setColor(Color.MAGENTA);
               p2.setTextSize(50);
               c.drawText("Circle", 70, 700, p2);
               c.drawCircle(130, 860, 120, p2);
           }
       });


  line.setOnClickListener(new View.OnClickListener()
  {
             @Override
             public void onClick(View view) {
                 Paint p3 = new Paint();
                 p3.setColor(Color.WHITE);
                 p3.setTextSize(50);
                 p3.setStrokeWidth(20);
                 c.drawText("Line", 350, 700, p3);
                 c.drawLine(350, 800, 800, 800, p3);
             }
         });
     }
  }
```

To implement Animation

Step6: In **activity_main2.xml** create user interface.

Step7: in **MainActivity2.java** implement operations to perform task.

```
public class MainActivity2 extends
AppCompatActivity {


    Button fadeBtn, rotateBtn, zoomBtn, blinkBtn;
    ImageView textView;
       @Override
 protected void onCreate(Bundle savedInstanceState)
{
           super.onCreate(savedInstanceState);
           setContentView(R.layout.activity_main3);
           textView = findViewById(R.id.imageView);
           fadeBtn = findViewById(R.id.button);
           rotateBtn = findViewById(R.id.button2);
           zoomBtn = findViewById(R.id.button3);
           blinkBtn = findViewById(R.id.button4);


// Fade Animation
fadeBtn.setOnClickListener(new
View.OnClickListener() {
               @Override
    public void onClick(View view) {
    Animation fade =
AnimationUtils.loadAnimation(getApplicationContext(
), R.anim.fade);
textView.startAnimation(fade);
   }
 });
```

```
    // Rotate Animation
    rotateBtn.setOnClickListener(new
    View.OnClickListener() {
                    @Override
     public void onClick(View view) {
      Animation rotate =
    AnimationUtils.loadAnimation(getApplicationContext(
    ), R.anim.rotate);
      textView.startAnimation(rotate);
       }
      });

    // Zoom Animation
     zoomBtn.setOnClickListener(new
    View.OnClickListener() {
                    @Override
    public void onClick(View view) {
     Animation zoom =
    AnimationUtils.loadAnimation(getApplicationContext(
    ), R.anim.zoom);
    textView.startAnimation(zoom);
     }
     });
  // Blink Animation
   blinkBtn.setOnClickListener(new
  View.OnClickListener() {
   @Override
   public void onClick(View view) {
   Animation blink =
  AnimationUtils.loadAnimation(getApplicationContext(
  ), R.anim.blink);
  textView.startAnimation(blink);
   }
   });
   }
  }
```

Step 8: right click into **res** folder->android Resourse Directory->select resource type **raw** name it as Anim.

Step9: right click into **Anim** folder->android animation->name it as **fade**

fade.xml

```
<?xml version="1.0" encoding="utf-8"?>
<alpha xmlns:android="http://schemas.android.com/apk/res/android"
 android:duration="2000"
 android:fromAlpha="1.0"
 android:toAlpha="0.0" />
```

Step10: right click into **Anim** folder->android animation->name it as **rotate**

rotate.xml

```
<?xml version="1.0" encoding="utf-8"?>
<rotate xmlns:android="http://schemas.android.com/apk/res/android"
 android:duration="2000"
 android:fromDegrees="0"
 android:pivotX="50%"
 android:pivotY="50%"
 android:toDegrees="360" />
```

Step11: right click into **Anim** folder->android animation->name it as **zoom**

```
<?xml version="1.0" encoding="utf-8"?>
<scale xmlns:android="http://schemas.android.com/apk/res/android"
 android:duration="2000"
android:fromXScale="1.0"
 android:fromYScale="1.0"
android:toXScale="2.0"
 android:toYScale="2.0"
 android:pivotX="50%"
 android:pivotY="50%" />
```

Step12: right click into **Anim** folder->android animation->name it as **blink**

blink.xml

```
<?xml version="1.0" encoding="utf-8"?>
<alpha xmlns:android="http://schemas.android.com/apk/res/android"
 android:duration="300"
 android:fromAlpha="1.0"
 android:toAlpha="0.0"
 android:repeatCount="infinite"
 android:repeatMode="reverse" />
```