

1. Implementing Activities using Intents.

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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <EditText
        android:id="@+id/name"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Name"
        android:inputType="textPersonName"
        android:minHeight="48dp"
        app:layout_constraintBottom_toBottomOf="parent"
        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="0.179"
        android:importantForAutofill="no"
        tools:ignore="HardcodedText" />
    <Button
        android:id="@+id/login"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="LOGIN"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/name"
        app:layout_constraintVertical_bias="0.413"
```

```

    tools:ignore="HardcodedText" />
<EditText
    android:id="@+id/pwd"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Password"
    android:inputType="textPassword"
    app:layout_constraintBottom_toBottomOf="parent"
    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="0.37"
    tools:ignore="Autofill,HardcodedText,TouchTargetSizeCheck" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_sndpg.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=".secondpg">
    <TextView
        android:id="@+id/result"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/textview1"
        android:textSize="30sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.494"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.224"
        android:textColor="@color/black"/>
    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Welcome!">
```

```
    app:layout_constraintBottom_toBottomOf="parent"
    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="0.141"
    android:textSize="30sp"
    android:textColor="@color/black"
    tools:ignore="HardcodedText" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java:

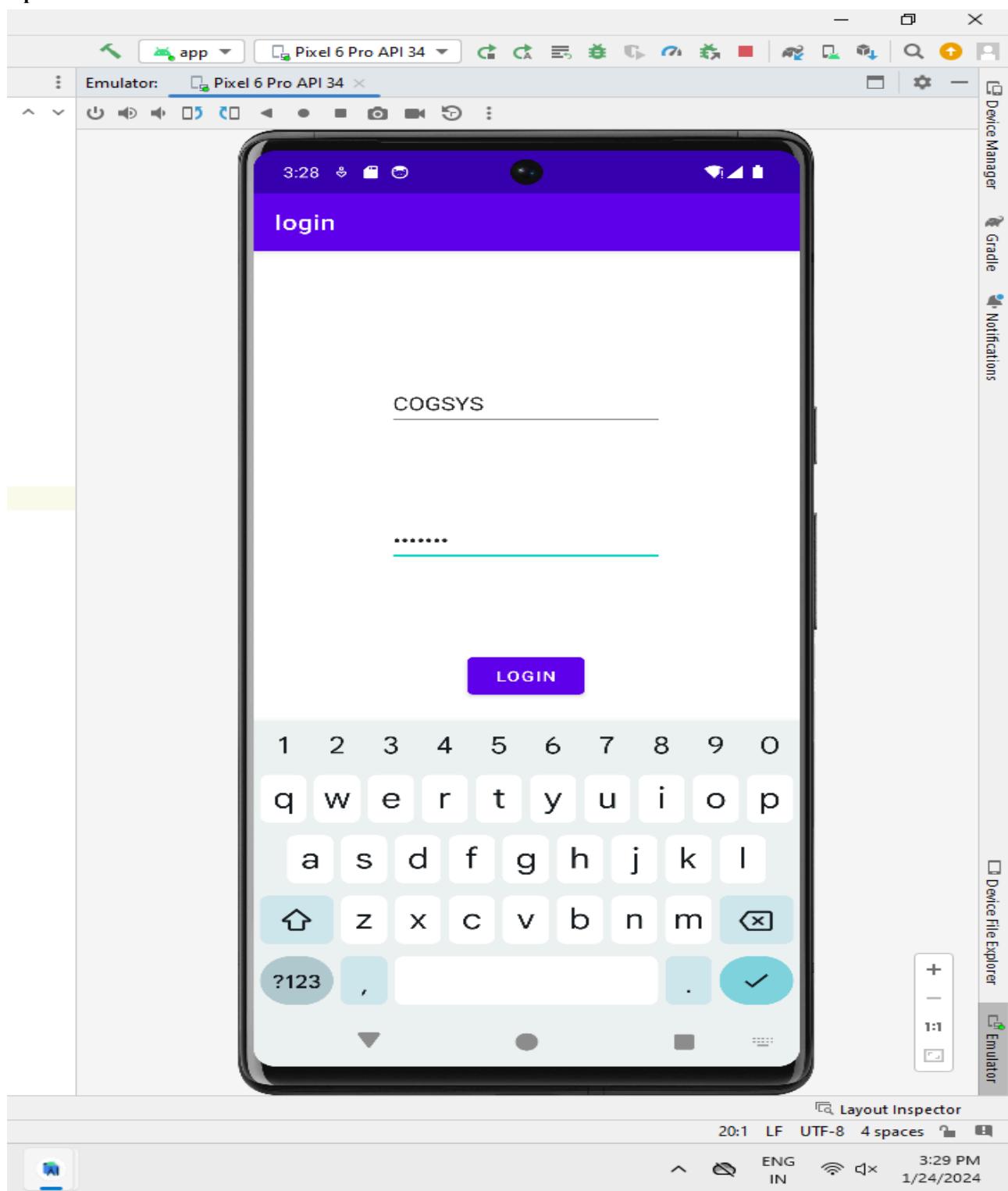
```
package com.example.login;
import android.content.Intent;
import android.os.Bundle;
import android.widget.Button;
import android.widget.EditText;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
    public static final String EXTRA_TEXT =
        "com.example.application.example.EXTRA_TEXT";
    Button but;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        but = findViewById(R.id.login);
        but.setOnClickListener(v -> activity2());
    }
    public void activity2(){
        EditText editTextName= findViewById(R.id.name);
        String text =editTextName.getText().toString();
        Intent intent = new Intent(this, secondpg.class);
        intent.putExtra(EXTRA_TEXT,text);
        startActivity(intent);
    }
}
```

Secondpage.java:

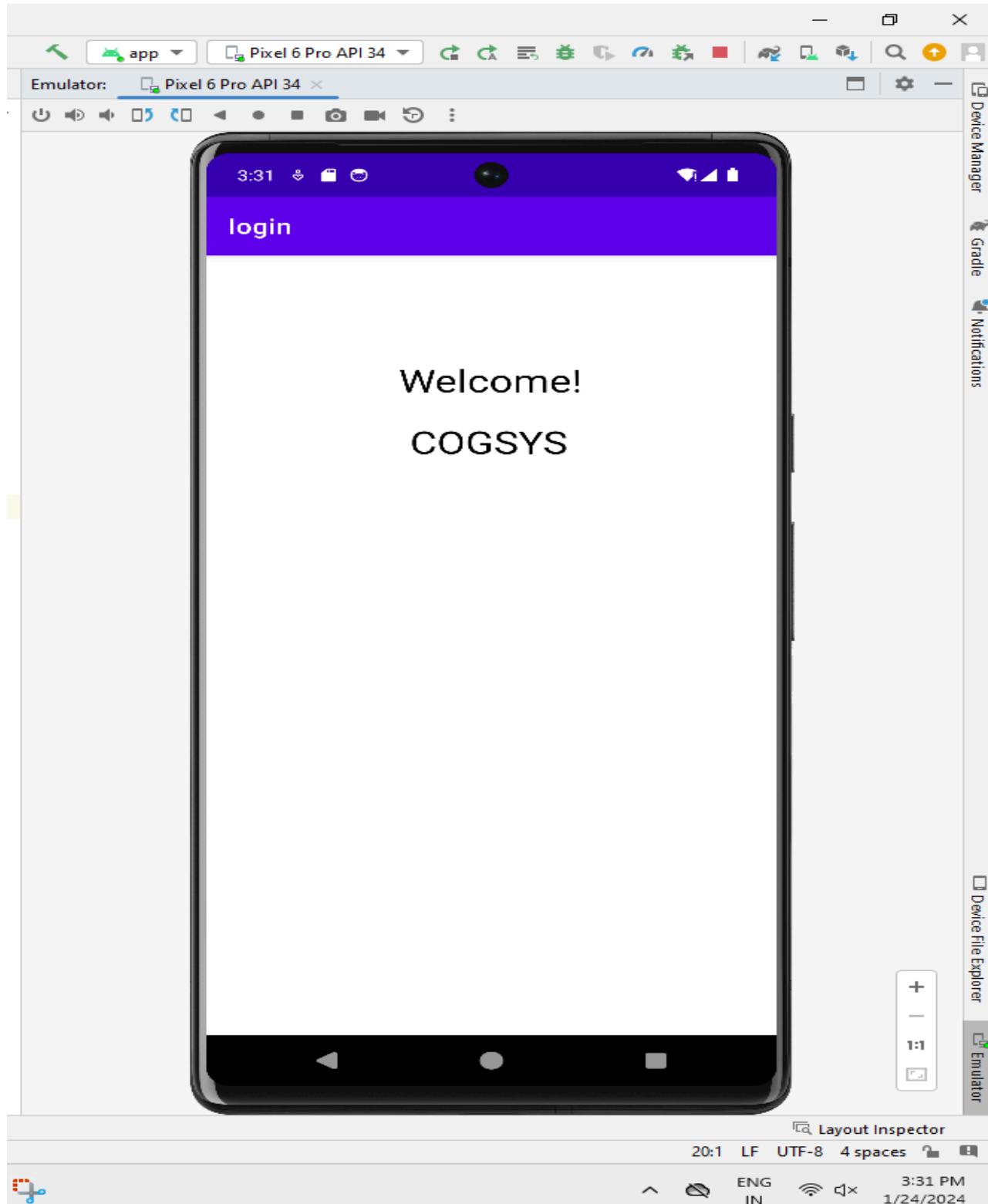
```
package com.example.login;
import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;
public class secondpg extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_secondpg);
```

```
Intent intent= getIntent();
String text= intent.getStringExtra(com.example.login.MainActivity.EXTRA_TEXT);
TextView res= findViewById(R.id.result);
res.setText(text);
}
}
```

Input screen:



Output screen:



2.Develope an Application to set an image as wallpaper and on click of a button the image should start to change randomly

Activity_main.xml

```
<?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">
    <ImageView
        android:id="@+id/imageView"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:scaleType="centerCrop" />
    <Button
        android:id="@+id/changeWallpaperButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_alignParentBottom="true"
        android:layout_marginBottom="16dp"
        android:text="Change Wallpaper" />
</RelativeLayout>
```

MainActivity.java:

```
package com.example.activity.wallpaperchange;
import android.Manifest;
import android.annotation.SuppressLint;
import android.app.WallpaperManager;
import android.content.pm.PackageManager;
import android.os.Build;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;
import com.example.activity.wallpaperchange.R;
import java.io.IOException;
import java.util.Random;
public class MainActivity extends AppCompatActivity {
    private static final int REQUEST_CODE_PERMISSION = 123;
    private ImageView imageView;
    private Button changeWallpaperButton;
    private int[] wallpaperImages = {
```

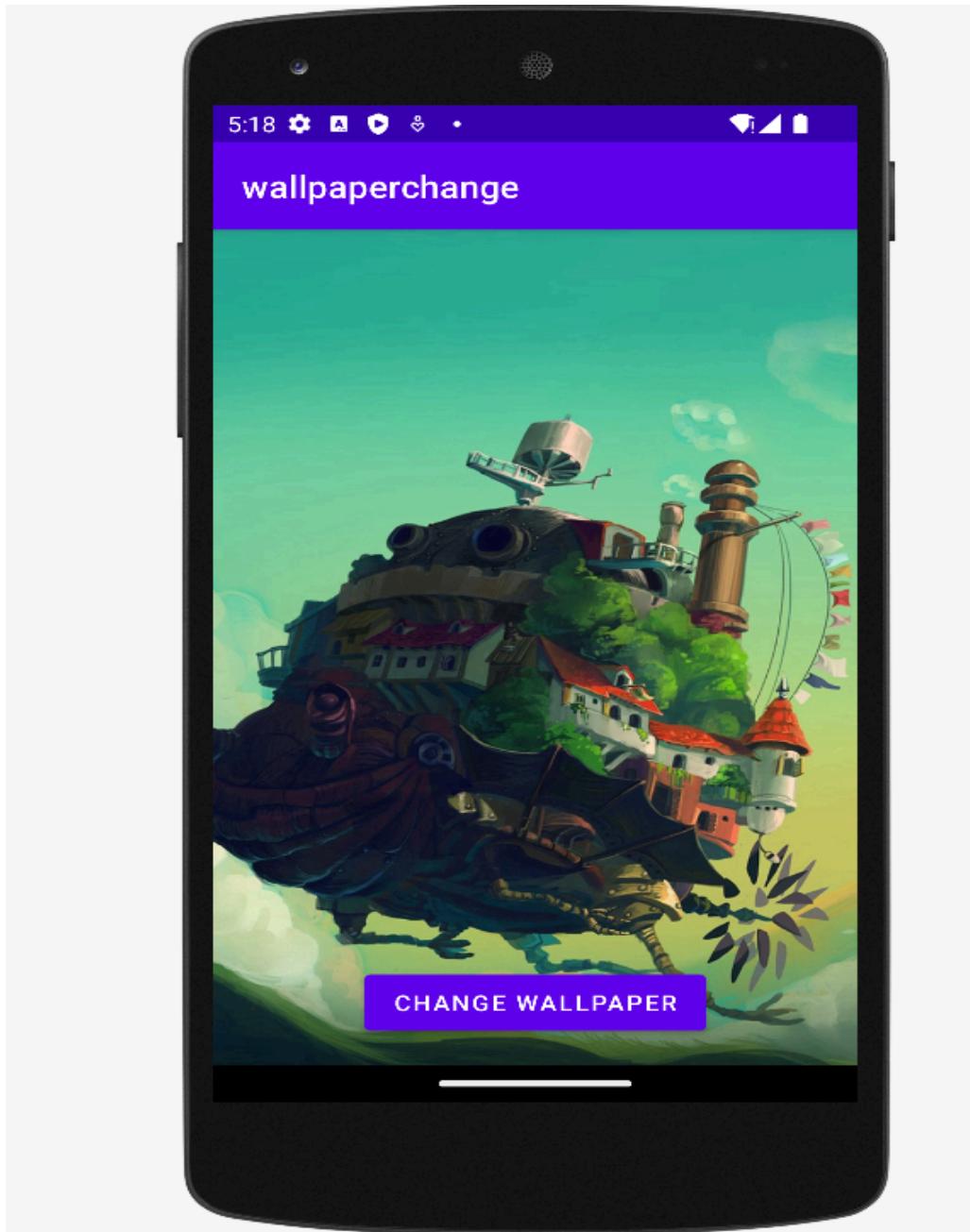
```

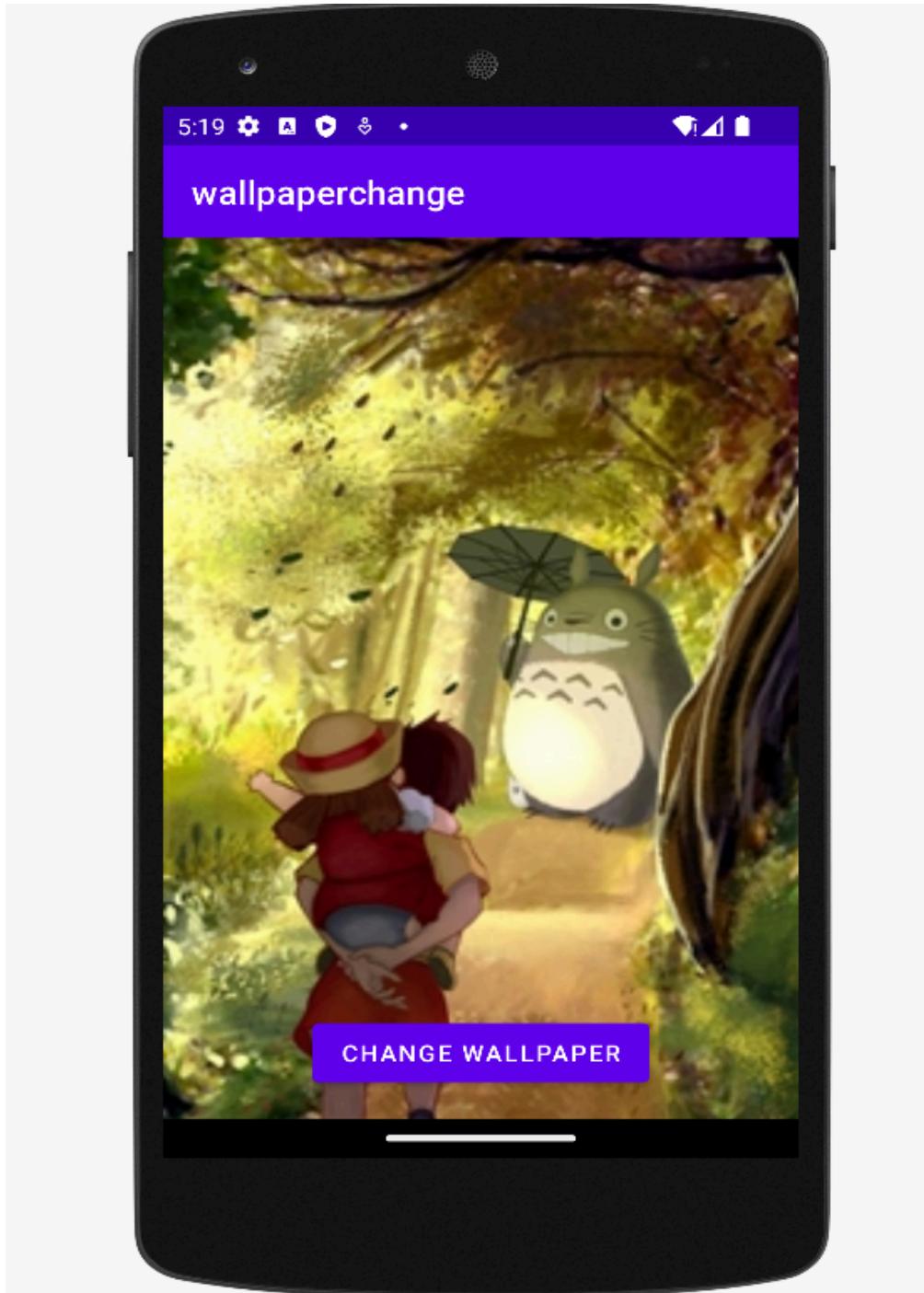
        R.drawable.wallpaper1,
        R.drawable.wallpaper2,
        R.drawable.wallpaper3
        // Add more wallpaper images as needed
    };
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        imageView = findViewById(R.id.imageView);
        changeWallpaperButton = findViewById(R.id.changeWallpaperButton);
        // Set initial wallpaper
        setRandomWallpaper();
        // Set click listener for the button
        changeWallpaperButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                // Change wallpaper on button click
                setRandomWallpaper();
            }
        });
        // Request permission if not granted
        requestPermission();
    }
    private void requestPermission() {
        if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M &&
            ContextCompat.checkSelfPermission(this, Manifest.permission.SET_WALLPAPER)
            != PackageManager.PERMISSION_GRANTED) {
            ActivityCompat.requestPermissions(
                this,
                new String[]{Manifest.permission.SET_WALLPAPER},
                REQUEST_CODE_PERMISSION
            );
        }
    }
    @SuppressLint("MissingSuperCall")
    @Override
    public void onRequestPermissionsResult(int requestCode, @NonNull String[] permissions, @NonNull int[] grantResults) {
        if (requestCode == REQUEST_CODE_PERMISSION && grantResults.length > 0
            && grantResults[0] == PackageManager.PERMISSION_GRANTED) {
            // Permission granted
        }
    }
    private void setRandomWallpaper() {
        // Choose a random wallpaper image
        int randomIndex = new Random().nextInt(wallpaperImages.length);
        int resourceId = wallpaperImages[randomIndex];
        // Set the chosen image as wallpaper
    }
}

```

```
try {  
    WallpaperManager.getInstance(this).setResource(resourceId);  
} catch (IOException e) {  
    e.printStackTrace();  
}  
// Set the chosen image in the ImageView  
imageView.setImageResource(resourceId);  
}  
}
```

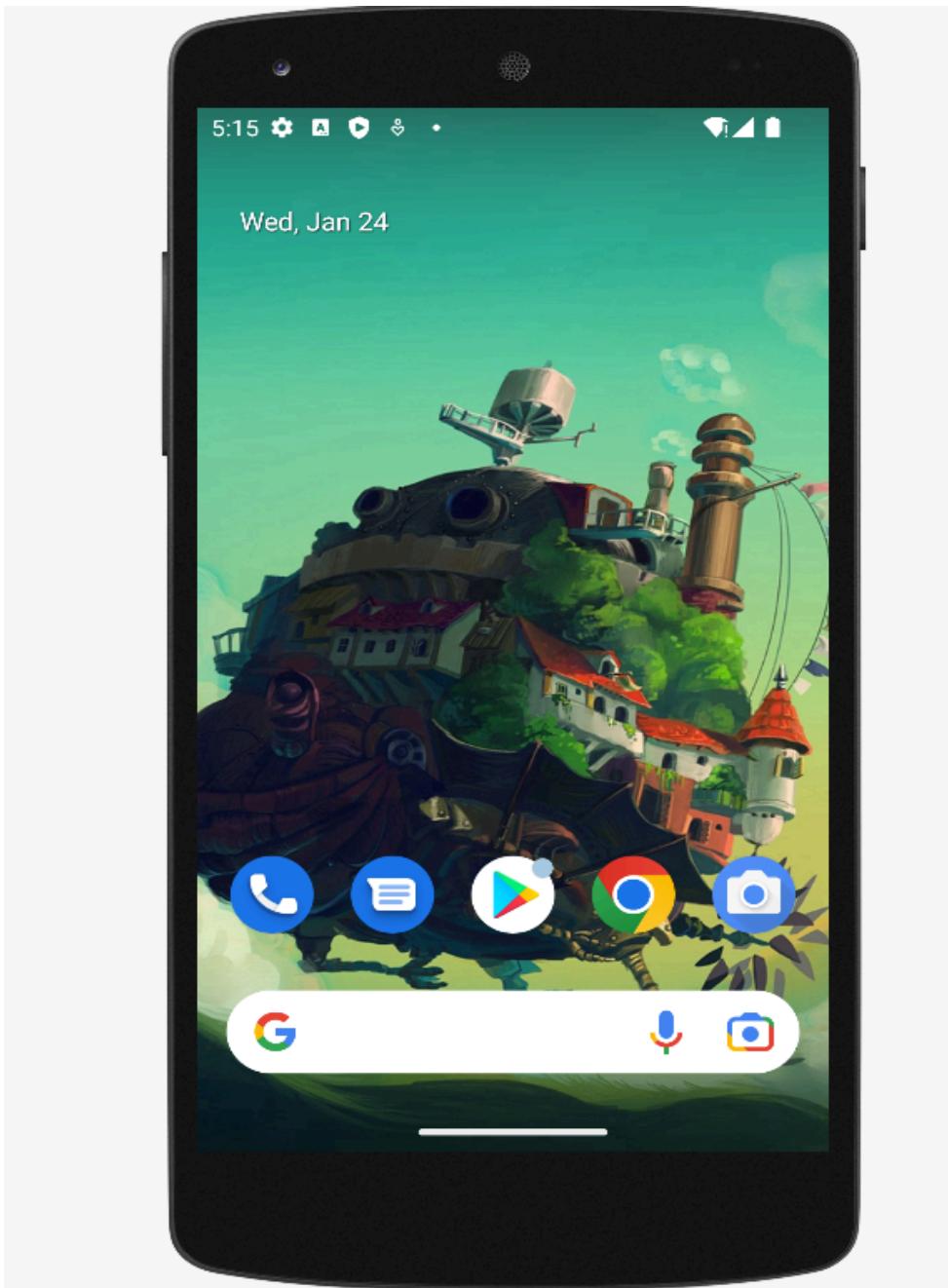
Input screen:

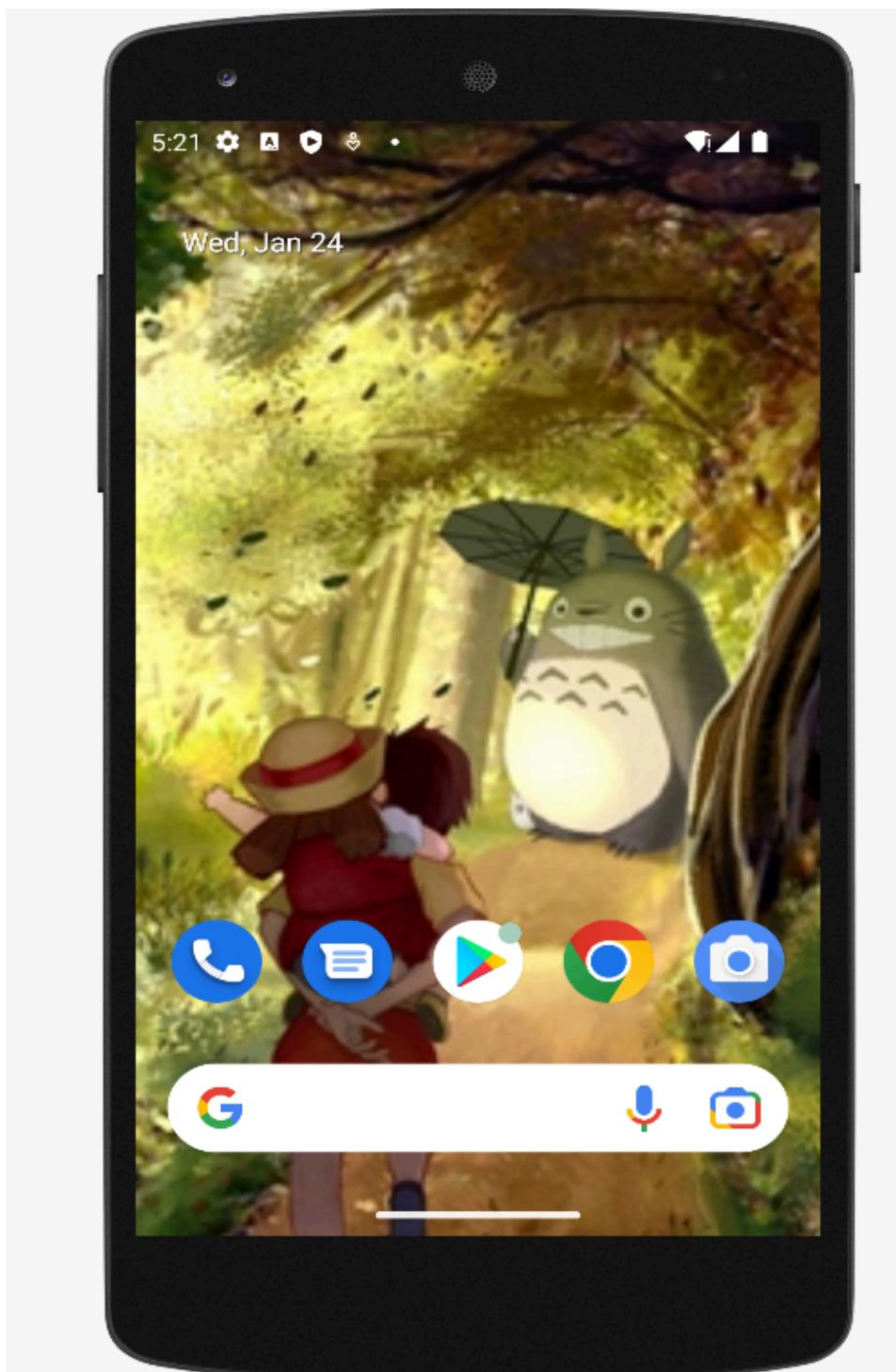






Output screen:







3.Implementing UI component using various view layout

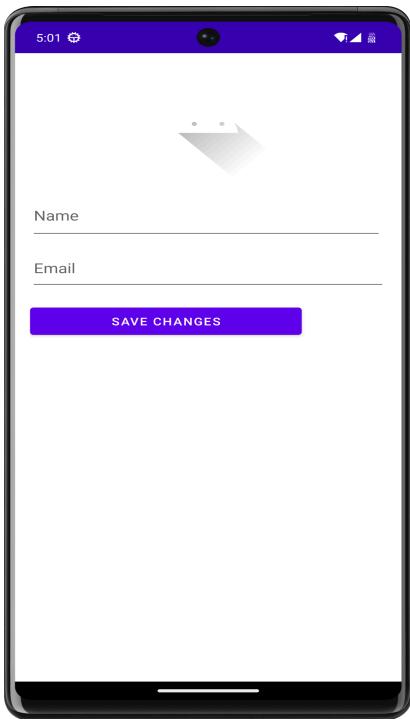
```
activity_main.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">
    <ImageView
        android:id="@+id/profileImage"
        android:layout_width="150dp"
        android:layout_height="150dp"
        android:layout_gravity="center"
        android:layout_marginBottom="16dp"
        android:src="@drawable/ic_launcher_foreground"
        tools:ignore="ContentDescription,ImageContrastCheck" />
    <EditText
        android:id="@+id/editTextName"
        android:layout_width="375dp"
        android:layout_height="63dp"
        android:layout_marginBottom="8dp"
        android:hint="@string/name"
        tools:ignore="TextFields"
        android:importantForAutofill="no" />
    <EditText
        android:id="@+id/editTextEmail"
        android:layout_width="379dp"
        android:layout_height="59dp"
        android:layout_marginBottom="16dp"
        android:hint="Email"
        android:inputType="textEmailAddress"
        android:importantForAutofill="no"
        tools:ignore="HardcodedText" />
    <Button
        android:id="@+id/buttonSave"
        android:layout_width="289dp"
        android:layout_height="wrap_content"
        android:text="@string/save_changes" />
</LinearLayout>
```

MainActivity.java:

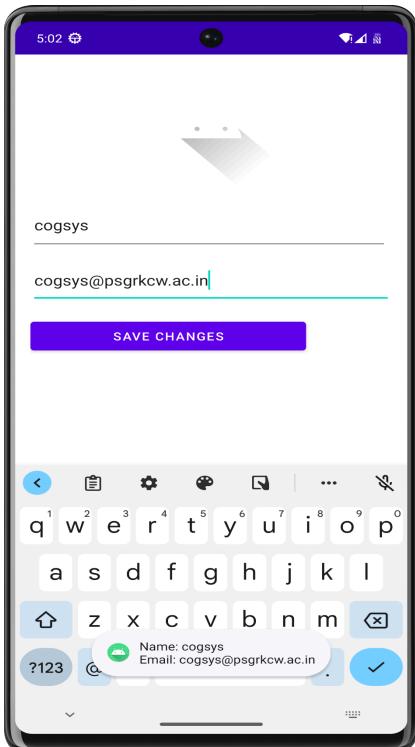
```
package com.example.myapplication;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
```

```
import android.widget.ImageView;
import android.widget.Toast;
import android.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ImageView profileImage = findViewById(R.id.profileImage);
        EditText editTextName = findViewById(R.id.editTextName);
        EditText editTextEmail = findViewById(R.id.editTextEmail);
        Button buttonSave = findViewById(R.id.buttonSave);
        buttonSave.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String name = editTextName.getText().toString();
                String email = editTextEmail.getText().toString();
                // Save logic here (you can replace this with your actual implementation)
                // Display a toast message for demonstration purposes
                String message = "Name: " + name + "\nEmail: " + email;
                Toast.makeText(MainActivity.this, message, Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

Input screen:



Output screen:



4.Develop an android application using controls like button, textView, editText for designing a calculator having basic functionality like addition, subtraction, multiplication and division.

activity_main.xml:

```
<?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"
    android:padding="16dp"
    tools:context=".MainActivity">
    <EditText
        android:id="@+id/editText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginBottom="16dp"
        android:hint="0"
        android:inputType="text"
        android:textSize="24sp"
        tools:ignore="Autofill,DuplicateSpeakableTextCheck,HardcodedText,VisualLintTextFieldSize" />
    <GridLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="@color/design_default_color_primary"
        android:columnCount="4"
        android:rowCount="5">
        <!-- Buttons -->
        <Button
            style="?android:attr/borderlessButtonStyle"
            android:onClick="onClearButtonClick"
            android:text="C"
            tools:ignore="HardcodedText" />
        <Button
            style="?android:attr/borderlessButtonStyle"
            android:onClick="onOperatorClick"
            android:text="+"
            tools:ignore="HardcodedText" />
        <Button
            style="?android:attr/borderlessButtonStyle"
            android:onClick="onOperatorClick"
            android:text="-"
            tools:ignore="HardcodedText" />
        <Button
            style="?android:attr/borderlessButtonStyle"
            android:onClick="onOperatorClick"
            android:text "*"
            tools:ignore="HardcodedText" />
```

```
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="1"
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="2"
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="3"
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onOperatorClick"
    android:text="/"
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="4"
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="5"
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="6"
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="."
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="7"
    tools:ignore="HardcodedText" />
<Button
    style="?android:attr/borderlessButtonStyle"
    android:onClick="onNumberClick"
    android:text="8"
```

```

        tools:ignore="HardcodedText" />
    <Button
        style="?android:attr/borderlessButtonStyle"
        android:onClick="onNumberClick"
        android:text="9"
        tools:ignore="HardcodedText" />
    <Button
        style="?android:attr/borderlessButtonStyle"
        android:onClick="onEqualButtonClick"
        android:text="="
        tools:ignore="DuplicateSpeakableTextCheck,HardcodedText" />
    <Button
        style="?android:attr/borderlessButtonStyle"
        android:onClick="onNumberClick"
        android:text="0"
        tools:ignore="HardcodedText" />
    <Button
        style="?android:attr/borderlessButtonStyle"
        android:layout_columnSpan="2"
        android:onClick="onEqualButtonClick"
        android:text="="
        tools:ignore="HardcodedText" />
</GridLayout>
</LinearLayout>
```

MainActivity.java:

```

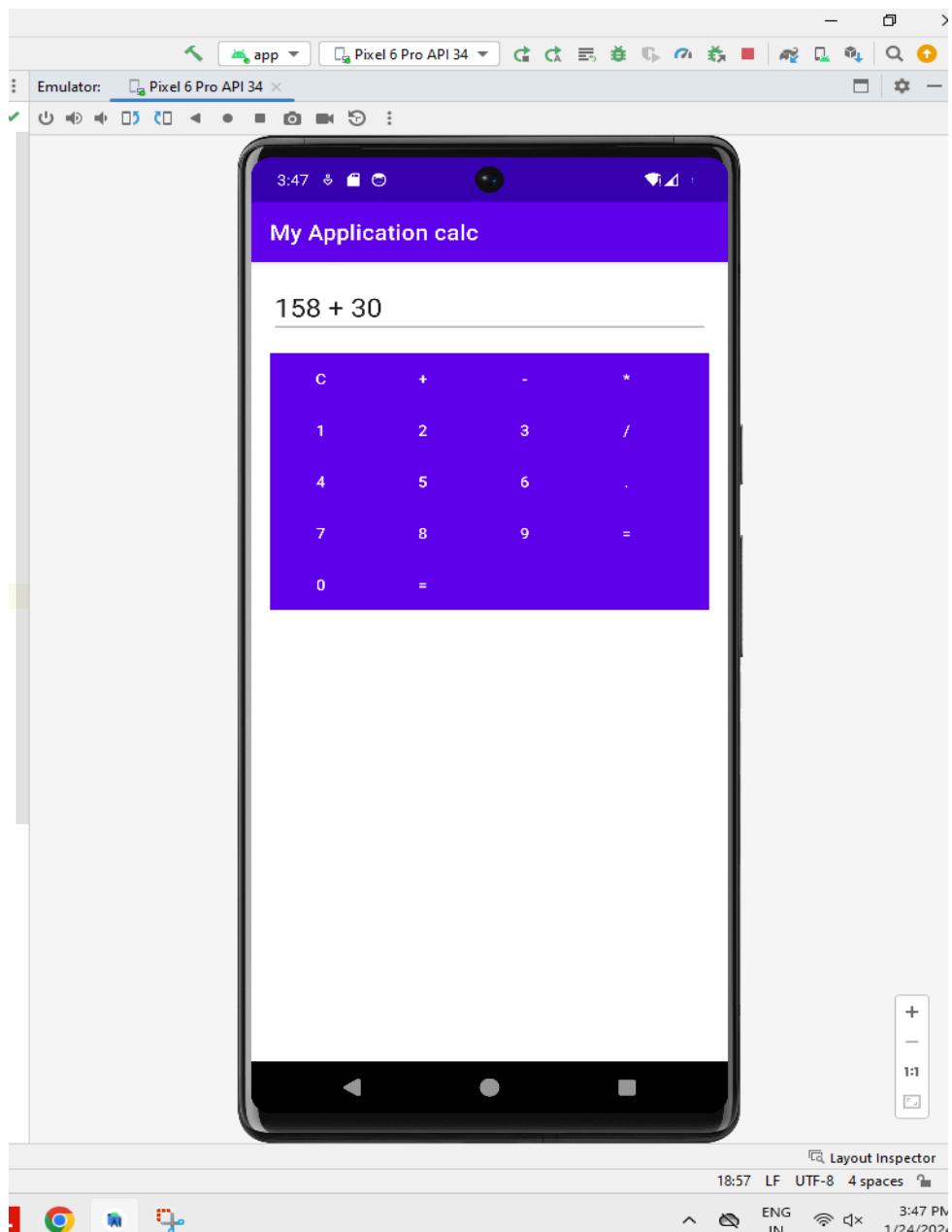
package com.example.activity.myapplicationcalc;
import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import androidx.appcompat.app.AppCompatActivity;
import org.mariuszgromada.math.mxparser.Expression;
public class MainActivity extends AppCompatActivity {
    private EditText editText;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        editText = findViewById(R.id.editText);
    }
    public void onNumberClick(View view) {
        Button button = (Button) view;
        editText.append(button.getText());
    }
    public void onOperatorClick(View view) {
        Button button = (Button) view;
        editText.append(" " + button.getText() + " ");
```

```
}

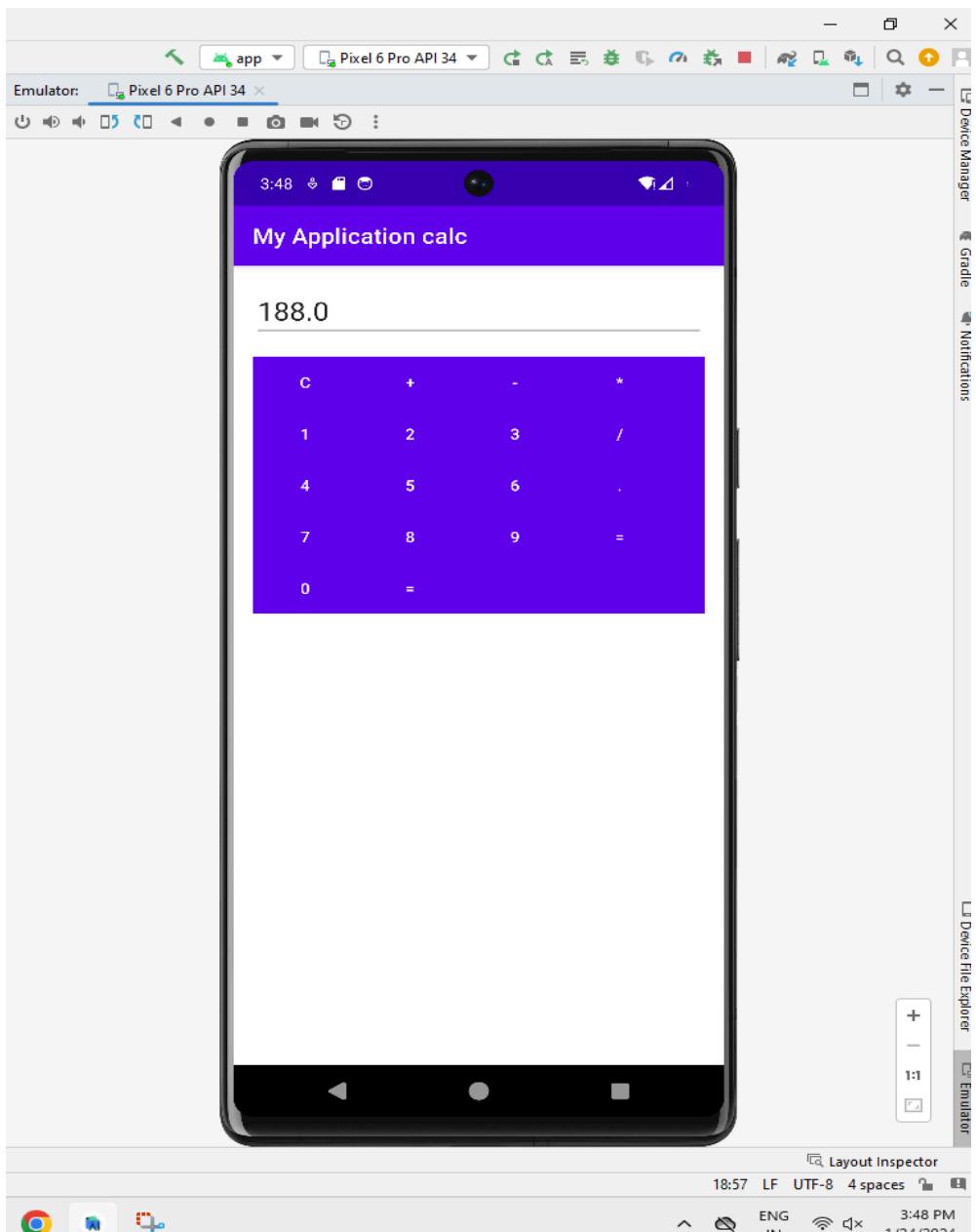
public void onClearButtonClick(View view) {
    editText.setText("");
}

@SuppressWarnings("SetTextI18n")
public void onEqualButtonClick(View view) {
    String expression = editText.getText().toString();
    try {
        Expression expr = new Expression(expression);
        double result = expr.calculate();
        editText.setText(Double.toString(result));
    } catch (Exception e) {
        editText.setText("Error");
    }
}
```

Input screen:



Output screen:



5.Exercise using controls like Radiogroup,Button and Checkbox.

Layout.xml

```
<?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:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="select your subject"
        android:textStyle="bold"
        android:textSize="30dp"
        tools:ignore="HardcodedText,SpUsage" />
    <CheckBox
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/tam"
        android:text="Tamil"
        android:textSize="25dp"
        tools:ignore="HardcodedText,SpUsage">
    </CheckBox>
    <CheckBox
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/eng"
        android:text="English"
        android:textSize="25dp"
        tools:ignore="HardcodedText,SpUsage">
    </CheckBox>
    <CheckBox
        android:id="@+id/social"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Social"
        android:textSize="25dp"
        tools:ignore="HardcodedText,SpUsage,TextSizeCheck">
    </CheckBox>
    <CheckBox
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/sci"
        android:text="Science"
        android:textSize="25dp"
        tools:ignore="HardcodedText,SpUsage">
    </CheckBox>
    <TextView
```

```

        android:id="@+id/gender"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Select your Gender"
        android:textSize="30dp"
        android:textStyle="bold"
        tools:ignore="HardcodedText,SpUsage" />
<RadioGroup
        android:id="@+id/rgGender"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">
<RadioButton
        android:id="@+id/male"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Male"
        android:textSize="25dp"
        tools:ignore="HardcodedText,SpUsage,TextSizeCheck" />
<RadioButton
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:id="@+id/female"
        android:text="Female"
        android:textSize="25dp"
        tools:ignore="HardcodedText,SpUsage" />
</RadioGroup>
<Button
        android:layout_width="100dp"
        android:layout_height="50dp"
        android:id="@+id/subBtn"
        android:text="Submit"
        android:gravity="center"
        android:layout_gravity="center"
        tools:ignore="HardcodedText" />
</LinearLayout>

```

MainActivity.java:

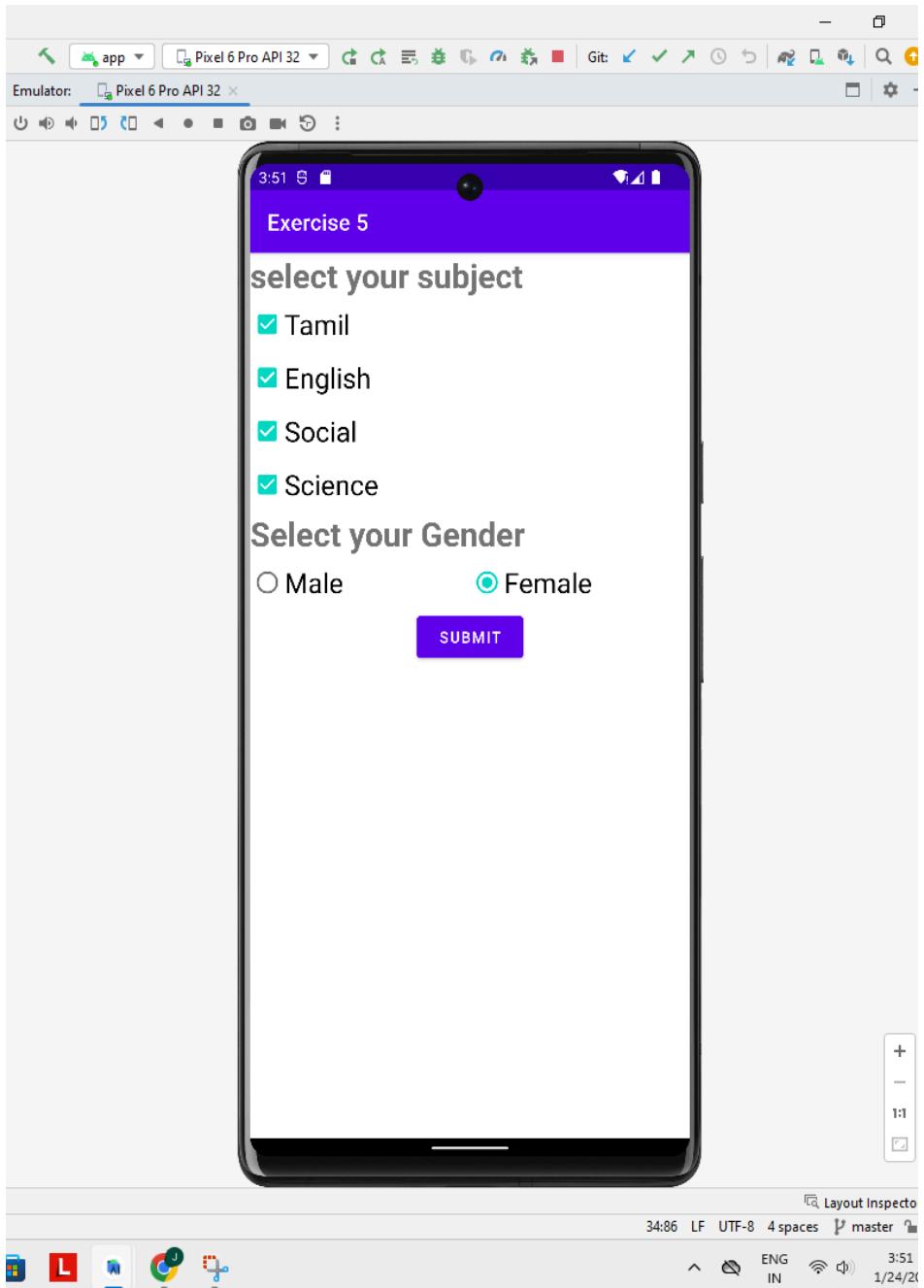
```

package com.example.exercise5;
import androidx.appcompat.app.AppCompatActivity;
import android.annotation.SuppressLint;
import android.os.Bundle;
import android.util.Log;
import android.widget.CheckBox;
import android.widget.CompoundButton;
import android.widget.RadioButton;
import android.widget.RadioGroup;

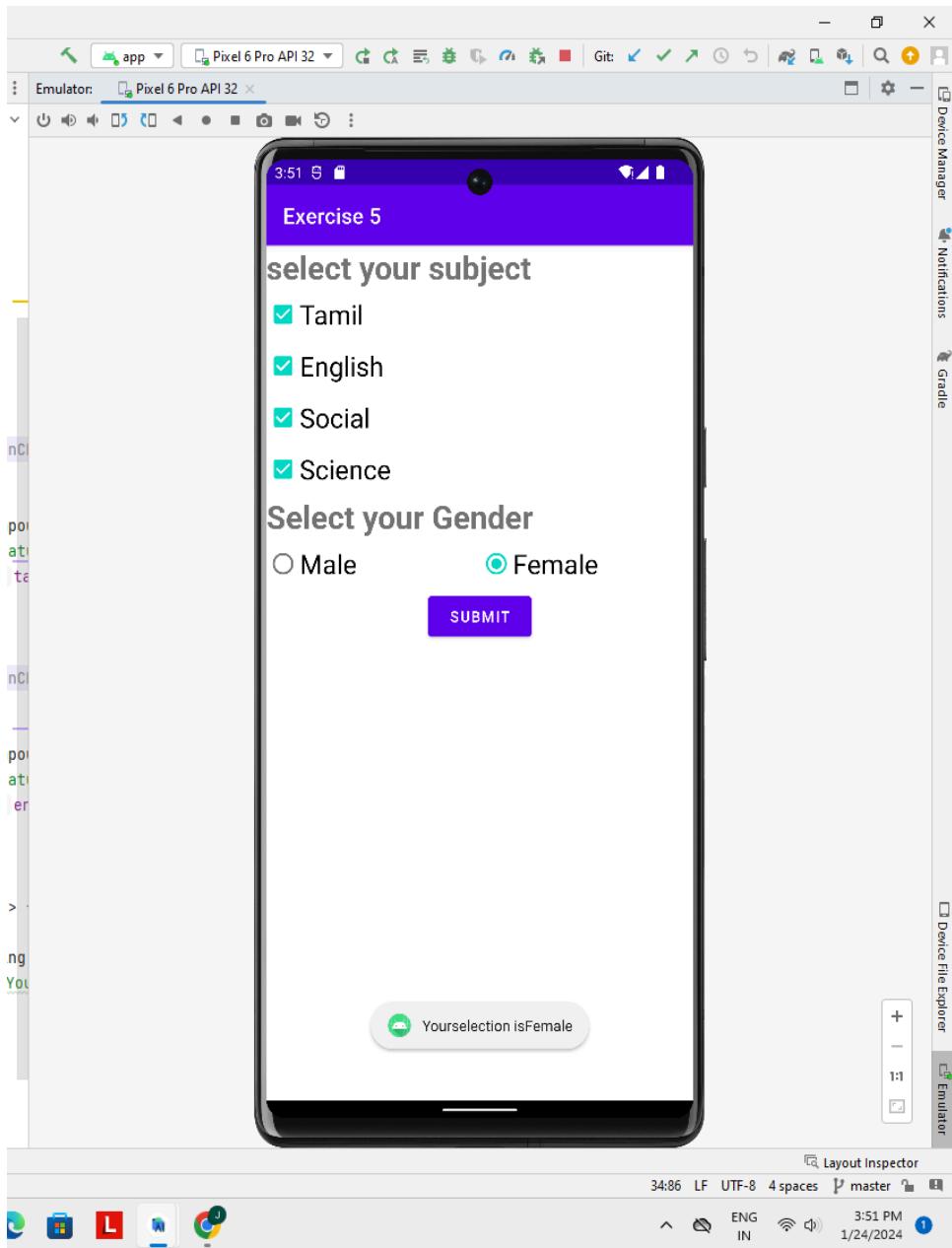
```

```
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    String TAG=MainActivity.class.getName();
    private CheckBox tam,eng,social,sci;
    private RadioGroup gender;
    @SuppressLint({"MissingSuperCall", "MissingInflatedId"})
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.layout);
        tam=findViewById(R.id.tam);
        eng=findViewById(R.id.eng);
        social=findViewById(R.id.social);
        sci=findViewById(R.id.sci);
        tam.setOnCheckedChangeListener(new CompoundButton.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(CompoundButton compoundButton, boolean b) {
                Log.d(TAG,tam.getText().toString()+"status"+b);
                Toast.makeText(getApplicationContext(),tam.getText().toString()+" "+b,Toast.LENGTH_LONG).show();
            }
        });
        eng.setOnCheckedChangeListener(new CompoundButton.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(CompoundButton compoundButton, boolean b) {
                Log.d(TAG,eng.getText().toString()+"status"+b);
                Toast.makeText(getApplicationContext(),eng.getText().toString()+" "+b,Toast.LENGTH_LONG).show();
            }
        });
        gender=findViewById(R.id.rgGender);
        gender.setOnCheckedChangeListener((radioGroup, i) -> {
            RadioButton radioButton=gender.findViewById(i);
            String selectedstr=radioButton.getText().toString();
            Toast.makeText(MainActivity.this, "Your selection is"+selectedstr,Toast.LENGTH_LONG).show();});
    }
}
```

Input screen:



Output screen:



6.Exercise using ProgressBar view and spinner View

activity_main.xml:

```
<?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"
    android:paddingLeft="16dp"
    android:paddingTop="16dp"
    android:paddingRight="16dp"
    android:paddingBottom="16dp"
    tools:context=".MainActivity">

    <ProgressBar
        android:id="@+id/progressBar"
        style="?android:attr/progressBarStyleHorizontal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_centerVertical="true"
        android:layout_marginTop="20dp"/>

    <Spinner
        android:id="@+id/spinner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/progressBar"
        android:layout_marginTop="20dp"/>
</RelativeLayout>
```

MainActivity.java:

```
package com.example.record6;

import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ProgressBar;
import android.widget.Spinner;

import androidx.appcompat.app.AppCompatActivity;

import com.example.record6.R;

public class MainActivity extends AppCompatActivity {

    private ProgressBar progressBar;
    private Spinner spinner;
    @Override
```

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);

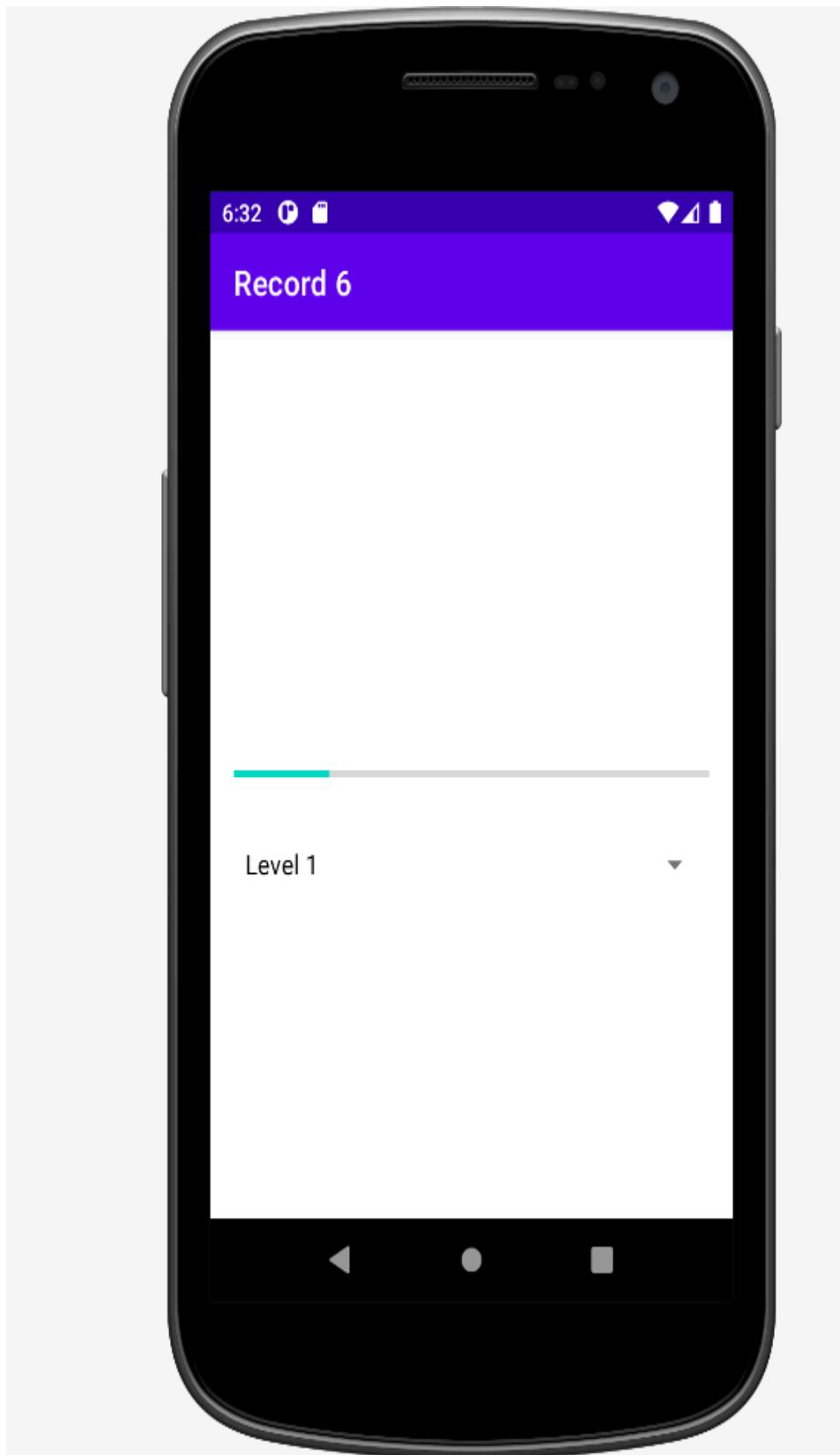
    // Initialize views
    progressBar = findViewById(R.id.progressBar);
    spinner = findViewById(R.id.spinner);

    // Set up spinner with sample data
    String[] spinnerItems = {"Level 1", "Level 2", "Level 3", "Level 4", "Level 5"};
    ArrayAdapter<String> adapter = new ArrayAdapter<>(this, android.R.layout.simple_spinner_dropdown_item,
    spinnerItems);
    spinner.setAdapter(adapter);

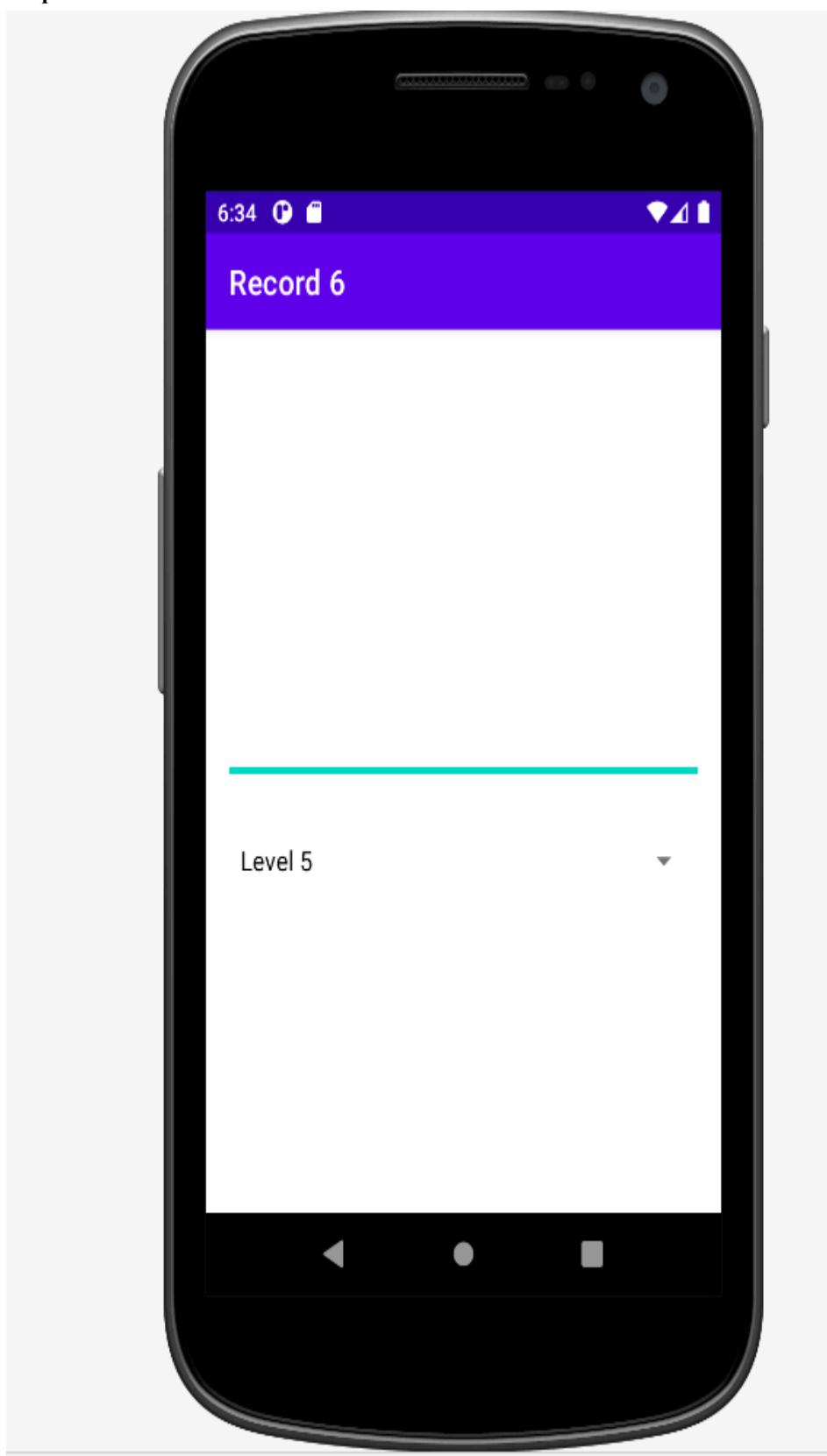
    // Set a listener for spinner item selection
    spinner.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
        @Override
        public void onItemSelected(AdapterView<?> parentView, View selectedItemView, int position, long id) {
            // Update progress bar based on the selected item
            int progress = (position + 1) * 20;
            progressBar.setProgress(progress);
        }

        @Override
        public void onNothingSelected(AdapterView<?> parentView) {
            // Do nothing here
        }
    });
}
```

Input screen:



Output screen:



7. Exercise using ImageView and TextView.

activity_main.xml:

```
<?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"
    android:background="@color/teal_200"
    tools:context=".MainActivity">
    <!-- ImageView to display an image -->
    <ImageView
        android:id="@+id/myImageView"
        android:layout_width="200dp"
        android:layout_height="200dp"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="50dp"
        android:src="@drawable/img1" />
    <!-- TextView to display text -->
    <TextView
        android:id="@+id/myTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/myImageView"
        android:layout_alignParentStart="true"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginStart="20dp"
        android:layout_marginTop="103dp"
        android:layout_marginEnd="15dp"
        android:layout_marginBottom="342dp"
        android:text="WELCOME TO ANDROID STUDIO !"
        android:textColor="@color/black"
        android:textSize="25sp" />
</RelativeLayout>
```

MainActivity.java:

```
package com.example.textviewandimage;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import com.example.textviewandimage.R;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

OUTPUT SCREEN::

