1. Develop an application to display your personal details using GUI Components.

activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:orientation="vertical"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:padding="16dp">

  <TextView
    android:id="@+id/titleTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Personal Details"
    android:textSize="24sp"
    android:layout_gravity="center_horizontal"
    android:layout_marginTop="40dp"/>

  <EditText
    android:id="@+id/nameEditText"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Enter Name"
    android:layout_marginTop="20dp"/>

  <EditText
    android:id="@+id/ageEditText"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Enter Age"
    android:inputType="number"
    android:layout_marginTop="10dp"/>

  <EditText
    android:id="@+id/emailEditText"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Enter Email"
    android:inputType="textEmailAddress"
    android:layout_marginTop="10dp"/>

  <Button
    android:id="@+id/displayButton"
    android:layout_width="wrap_content"
```

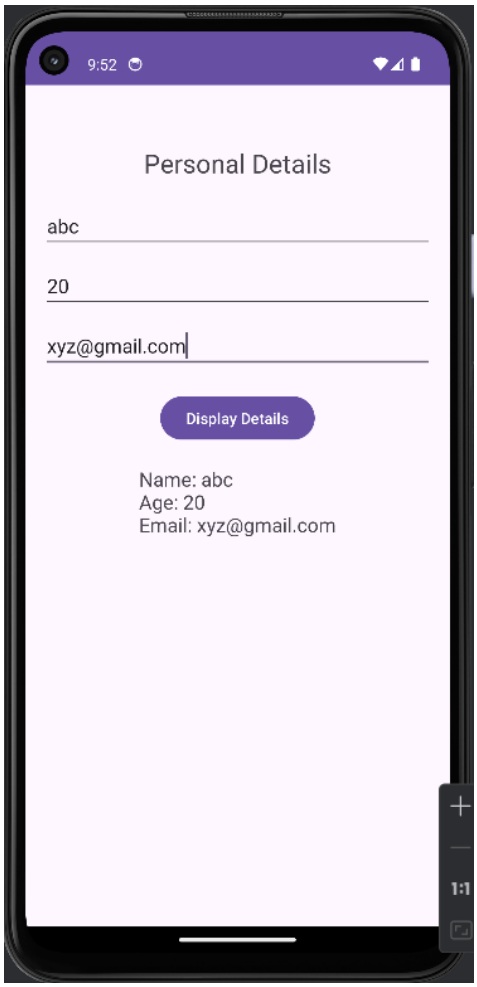
```
    android:layout_height="wrap_content"
    android:text="Display Details"
    android:layout_gravity="center_horizontal"
    android:layout_marginTop="20dp"/>

  <TextView
    android:id="@+id/detailsTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:textSize="18sp"
    android:layout_gravity="center_horizontal"
    android:layout_marginTop="20dp"/>

</LinearLayout>
```

MainActivity.java:

```
package com.example.personaldetails;

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 {

  private EditText nameEditText, ageEditText, emailEditText;
  private TextView detailsTextView;

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

    nameEditText = findViewById(R.id.nameEditText);
    ageEditText = findViewById(R.id.ageEditText);
    emailEditText = findViewById(R.id.emailEditText);
    detailsTextView = findViewById(R.id.detailsTextView);

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

```
        }
    });
  }

  private void displayDetails() {
    String name = nameEditText.getText().toString();
    String age = ageEditText.getText().toString();
    String email = emailEditText.getText().toString();

    detailsTextView.setText(String.format("Name: %s\nAge: %s\nEmail: %s", name,
age, email));
  }
}
```

Output:



2. Develop an application that uses Frame Layout.

activity_main.xml:

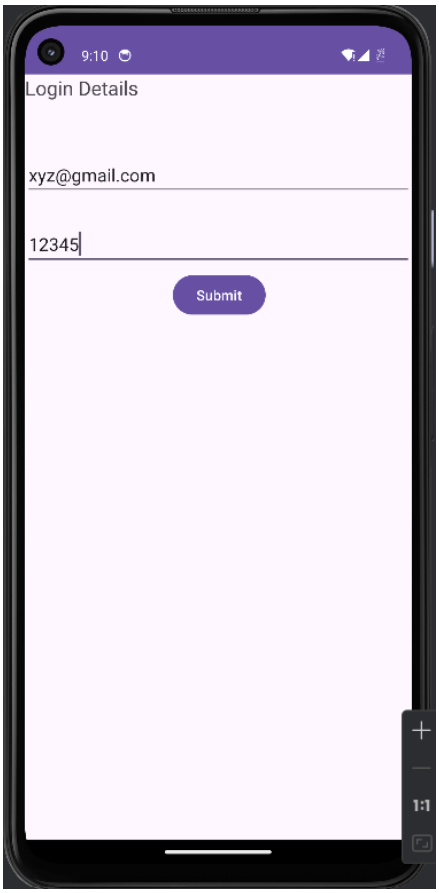
```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout_width="match_parent"
  android:layout_height="match_parent">

  <TextView
    android:id="@+id/txtvw1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Login Details"
    android:textSize="20sp" />

  <EditText
    android:id="@+id/editText1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="80dp"
    android:hint="Enter your email" />

  <EditText
    android:id="@+id/editText2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="150dp"
    android:hint="Enter password" />

  <Button
    android:id="@+id/btn1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="150dp"
    android:layout_marginTop="200dp"
    android:text="Submit" />
</FrameLayout>
```

MainActivity.java:

```
package com.example.framelayout;

import android.os.Bundle;
import android.widget.EditText;
import android.widget.TextView;
```

```
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

   TextView textView;
   EditText editText1, editText2;

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

      textView = findViewById(R.id.txtvw1);
      editText1 = findViewById(R.id.editText1);
      editText2 = findViewById(R.id.editText2);
   }
}
```

Output:



3. Develop an application that finds greatest among THREE numbers using GUI Components.

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">

  <EditText
    android:id="@+id/num1EditText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:hint="Enter number 1"
    android:inputType="number"/>

  <EditText
    android:id="@+id/num2EditText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/num1EditText"
    android:layout_marginTop="16dp"
    android:hint="Enter number 2"
    android:inputType="number"/>

  <EditText
    android:id="@+id/num3EditText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/num2EditText"
    android:layout_marginTop="16dp"
    android:hint="Enter number 3"
    android:inputType="number"/>

  <Button
    android:id="@+id/findButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/num3EditText"
    android:layout_marginTop="16dp"
    android:text="Find Greatest"
    android:layout_centerHorizontal="true"/>
```

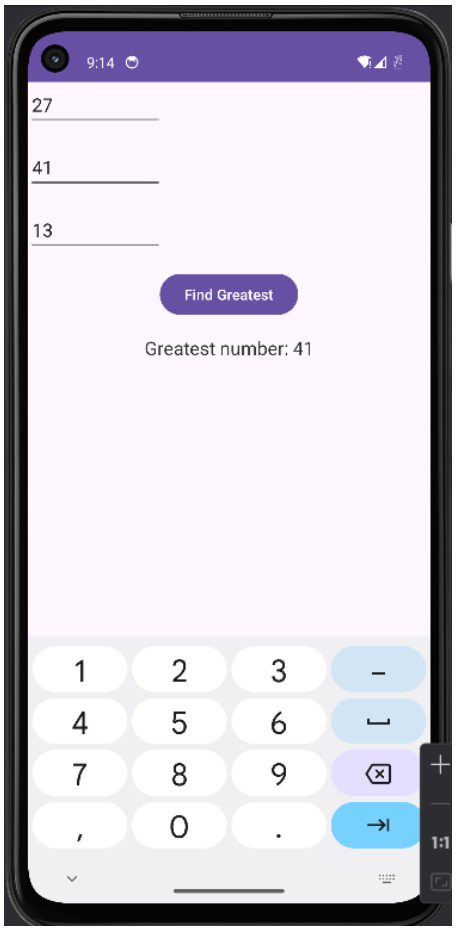
```
    <TextView
        android:id="@+id/resultTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@id/findButton"
        android:layout_marginTop="16dp"
        android:textSize="18sp"
        android:textColor="#333333"
        android:layout_centerHorizontal="true"/>

</RelativeLayout>
```

MainActivity.java:

```
package com.example.greatestofthree;

import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    private EditText num1EditText, num2EditText, num3EditText;
    private Button findButton;
    private TextView resultTextView;

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

        num1EditText = findViewById(R.id.num1EditText);
        num2EditText = findViewById(R.id.num2EditText);
        num3EditText = findViewById(R.id.num3EditText);
        findButton = findViewById(R.id.findButton);
        resultTextView = findViewById(R.id.resultTextView);

        findButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {

                int num1 = Integer.parseInt(num1EditText.getText().toString());
```

```
            int num2 = Integer.parseInt(num2EditText.getText().toString());
            int num3 = Integer.parseInt(num3EditText.getText().toString());

            int greatest = Math.max(num1, Math.max(num2, num3));

            resultTextView.setText("Greatest number: " + greatest);
        }
    });
  }
}
```

Output:



4. Develop an application that uses Layout Managers.

activity_main.xml:

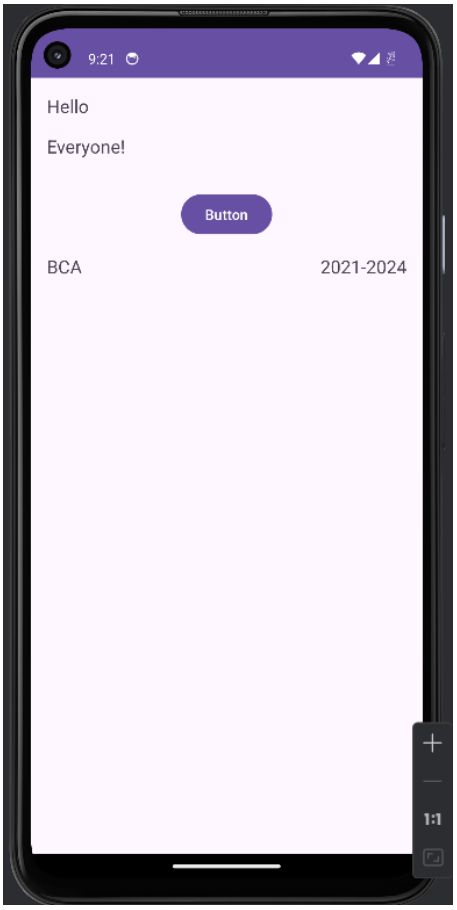
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical">

  <RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:padding="16dp">

    <TextView
      android:id="@+id/textView1"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Hello"
      android:textSize="18sp"/>

    <TextView
      android:id="@+id/textView2"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_below="@id/textView1"
      android:layout_marginTop="16dp"
      android:text="Everyone!"
      android:textSize="18sp"/>

  </RelativeLayout>

  <Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Button"
    android:layout_gravity="center_horizontal"
    android:layout_marginTop="16dp"/>

  <androidx.constraintlayout.widget.ConstraintLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:padding="16dp">
```

```
    <TextView
      android:id="@+id/textView3"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="BCA"
      android:textSize="18sp"
      app:layout_constraintStart_toStartOf="parent"
      app:layout_constraintTop_toTopOf="parent"/>

    <TextView
      android:id="@+id/textView4"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="2021-2024"
      android:textSize="18sp"
      app:layout_constraintEnd_toEndOf="parent"
      app:layout_constraintTop_toTopOf="parent"/>

  </androidx.constraintlayout.widget.ConstraintLayout>

</LinearLayout>
```

MainActivity.java:

```
package com.example.layoutmanager;
import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
  }
}
```

Output:



5. Develop an application that uses the radio button.

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">

   <RadioGroup
      android:id="@+id/radioGroup"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:orientation="vertical"
      android:layout_marginTop="24dp">

      <RadioButton
         android:id="@+id/option1RadioButton"
         android:layout_width="wrap_content"
```

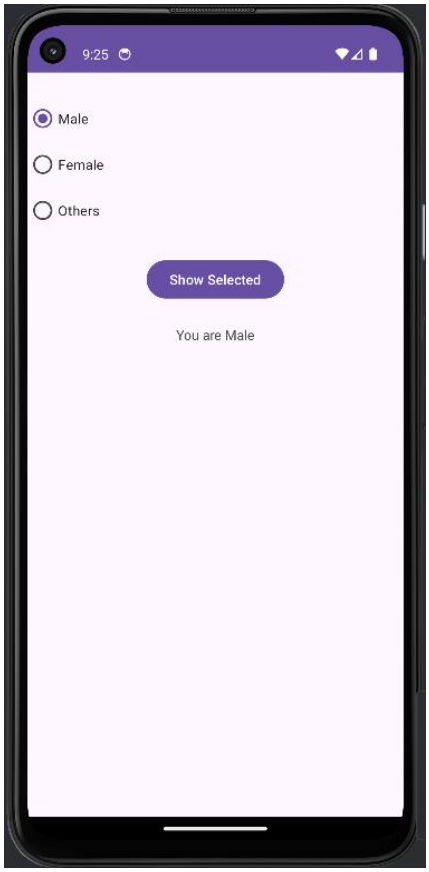
```
        android:layout_height="wrap_content"
        android:text="Male" />

    <RadioButton
        android:id="@+id/option2RadioButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Female" />

    <RadioButton
        android:id="@+id/option3RadioButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Others" />
  </RadioGroup>

  <Button
    android:id="@+id/showButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Show Selected"
    android:layout_below="@id/radioGroup"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="24dp"/>

  <TextView
    android:id="@+id/resultTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/showButton"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="24dp"/>

</RelativeLayout>
```

MainActivity.java:

```
package com.example.radiobutton;

import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.TextView;
```

```
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

   private RadioButton option1RadioButton, option2RadioButton, option3RadioButton;
   private Button showButton;
   private TextView resultTextView;

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

      option1RadioButton = findViewById(R.id.option1RadioButton);
      option2RadioButton = findViewById(R.id.option2RadioButton);
      option3RadioButton = findViewById(R.id.option3RadioButton);
      showButton = findViewById(R.id.showButton);
      resultTextView = findViewById(R.id.resultTextView);

      showButton.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View v) {
            if (option1RadioButton.isChecked()) {
               resultTextView.setText("You are Male");
            } else if (option2RadioButton.isChecked()) {
               resultTextView.setText("You are Female");
            } else if (option3RadioButton.isChecked()) {
               resultTextView.setText("You Selected Others");
            } else {
               Toast.makeText(getApplicationContext(), "Please select an option",
Toast.LENGTH_SHORT).show();
            }
         }
      });
   }
}
```

Output:



6. Develop an application that finds smallest among THREE numbers using GUI Components.

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">

   <EditText
      android:id="@+id/num1EditText"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:hint="Enter number 1"
      android:inputType="number"/>

   <EditText
      android:id="@+id/num2EditText"
```

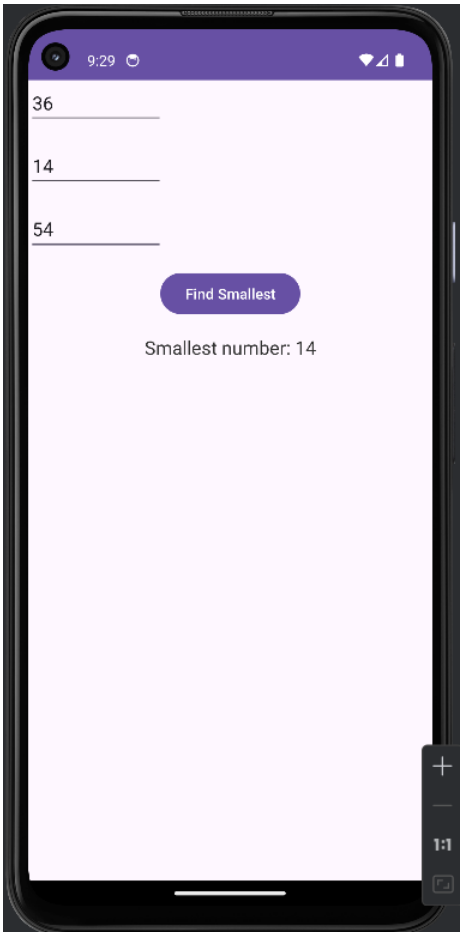
```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/num1EditText"
    android:layout_marginTop="16dp"
    android:hint="Enter number 2"
    android:inputType="number"/>

  <EditText
    android:id="@+id/num3EditText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/num2EditText"
    android:layout_marginTop="16dp"
    android:hint="Enter number 3"
    android:inputType="number"/>

  <Button
    android:id="@+id/findButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/num3EditText"
    android:layout_marginTop="16dp"
    android:text="Find Smallest"
    android:layout_centerHorizontal="true"/>

  <TextView
    android:id="@+id/resultTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/findButton"
    android:layout_marginTop="16dp"
    android:textSize="18sp"
    android:textColor="#333333"
    android:layout_centerHorizontal="true"/>

</RelativeLayout>
```

MainActivity.java:

```
package com.example.smallestofthree;

import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
```

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

public class MainActivity extends AppCompatActivity {

   private EditText num1EditText, num2EditText, num3EditText;
   private Button findButton;
   private TextView resultTextView;

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

      num1EditText = findViewById(R.id.num1EditText);
      num2EditText = findViewById(R.id.num2EditText);
      num3EditText = findViewById(R.id.num3EditText);
      findButton = findViewById(R.id.findButton);
      resultTextView = findViewById(R.id.resultTextView);

      findButton.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View v) {

            int num1 = Integer.parseInt(num1EditText.getText().toString());
            int num2 = Integer.parseInt(num2EditText.getText().toString());
            int num3 = Integer.parseInt(num3EditText.getText().toString());

            int greatest = Math.min(num1, Math.min(num2, num3));

            resultTextView.setText("Smallest number: " + greatest);
         }
      });
   }
}
```

Output:



7. Develop an application that uses Linear Layout with both horizontal and vertical views.

activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:orientation="vertical"
   android:padding="16dp">

   <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Vertical LinearLayout"
      android:textSize="20sp"
      android:textStyle="bold"
      android:layout_marginBottom="16dp"/>
```

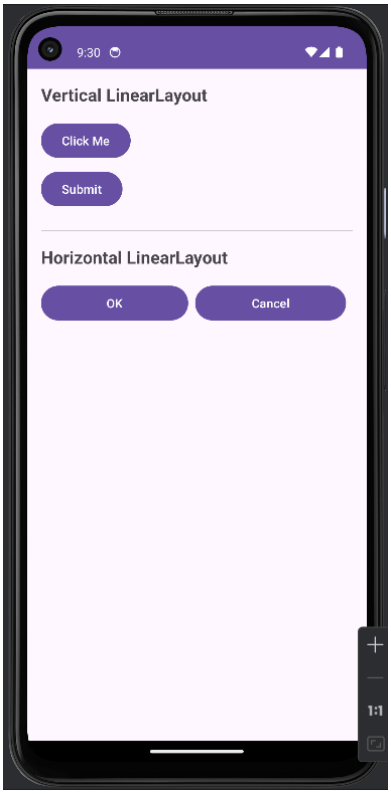
```
<Button
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Click Me"
  android:layout_marginBottom="8dp"/>

<Button
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Submit"
  android:layout_marginBottom="8dp"/>

<View
  android:layout_width="match_parent"
  android:layout_height="1dp"
  android:background="#CCCCCC"
  android:layout_marginTop="16dp"
  android:layout_marginBottom="16dp"/>

<TextView
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Horizontal LinearLayout"
  android:textSize="20sp"
  android:textStyle="bold"
  android:layout_marginBottom="16dp"/>

<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:orientation="horizontal">

  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="OK"
    android:layout_weight="1"
    android:layout_marginEnd="8dp"/>

  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Cancel"
    android:layout_weight="1"
    android:layout_marginEnd="8dp"/>
```

```
    </LinearLayout>

</LinearLayout>
```

MainActivity.java:

```
package com.example.linearlayouthorizontalvertical;

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

public class MainActivity extends AppCompatActivity {

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

Output:



8. Develop an application that uses Relative Layout.

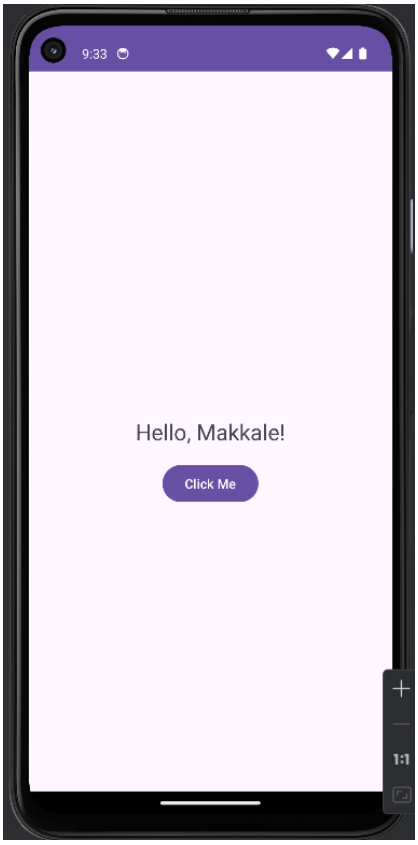
activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout_width="match_parent"
  android:layout_height="match_parent">

  <TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Hello, Makkale!"
    android:textSize="24sp"
    android:layout_centerInParent="true" />

  <Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Click Me"
    android:layout_below="@id/textView"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="16dp" />

</RelativeLayout>
```

MainActivity.java:

```
package com.example.relativelayout;

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

public class MainActivity extends AppCompatActivity {

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

Output:



9. Develop an application for Student Mark sheet processing.

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">

   <TextView
      android:id="@+id/mobileApplicationTextView"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Mobile Application Mark:"
      android:layout_marginTop="24dp"/>

   <EditText
      android:id="@+id/mobileApplicationMarkEditText"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
```

```
    android:layout_toEndOf="@id/mobileApplicationTextView"
    android:layout_alignBaseline="@id/mobileApplicationTextView"
    android:inputType="number"
    android:layout_marginStart="16dp"/>

  <TextView
    android:id="@+id/dataMiningTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Data Mining Mark:"
    android:layout_below="@id/mobileApplicationTextView"
    android:layout_marginTop="16dp"/>

  <EditText
    android:id="@+id/dataMiningMarkEditText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_toEndOf="@id/dataMiningTextView"
    android:layout_alignBaseline="@id/dataMiningTextView"
    android:inputType="number"
    android:layout_marginStart="16dp"/>

  <TextView
    android:id="@+id/webDesignTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Web Design Mark:"
    android:layout_below="@id/dataMiningTextView"
    android:layout_marginTop="16dp"/>

  <EditText
    android:id="@+id/webDesignMarkEditText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_toEndOf="@id/webDesignTextView"
    android:layout_alignBaseline="@id/webDesignTextView"
    android:inputType="number"
    android:layout_marginStart="16dp"/>

  <Button
    android:id="@+id/calculateButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Calculate"
    android:layout_below="@id/webDesignMarkEditText"
    android:layout_centerHorizontal="true"
```

```
    android:layout_marginTop="24dp"/>

  <TextView
    android:id="@+id/totalMarksTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Total Marks: "
    android:layout_below="@id/calculateButton"
    android:layout_marginTop="24dp"
    android:layout_centerHorizontal="true"/>

  <TextView
    android:id="@+id/percentageTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Percentage: "
    android:layout_below="@id/totalMarksTextView"
    android:layout_marginTop="16dp"
    android:layout_centerHorizontal="true"/>

  <TextView
    android:id="@+id/gradeTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Grade: "
    android:layout_below="@id/percentageTextView"
    android:layout_marginTop="16dp"
    android:layout_centerHorizontal="true"/>

</RelativeLayout>
```

MainActivity.java:

```
package com.example.studentmarksheet;

import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

  private EditText mobileApplicationMarkEditText, dataMiningMarkEditText,
webDesignMarkEditText;
```

```
    private Button calculateButton;
    private TextView totalMarksTextView, percentageTextView, gradeTextView;

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

        mobileApplicationMarkEditText =
findViewById(R.id.mobileApplicationMarkEditText);
        dataMiningMarkEditText = findViewById(R.id.dataMiningMarkEditText);
        webDesignMarkEditText = findViewById(R.id.webDesignMarkEditText);
        calculateButton = findViewById(R.id.calculateButton);
        totalMarksTextView = findViewById(R.id.totalMarksTextView);
        percentageTextView = findViewById(R.id.percentageTextView);
        gradeTextView = findViewById(R.id.gradeTextView);

        calculateButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {

                int mobileApplicationMark =
Integer.parseInt(mobileApplicationMarkEditText.getText().toString());
                int dataMiningMark =
Integer.parseInt(dataMiningMarkEditText.getText().toString());
                int webDesignMark =
Integer.parseInt(webDesignMarkEditText.getText().toString());

                int totalMarks = mobileApplicationMark + dataMiningMark + webDesignMark;

                float percentage = (float) totalMarks / 3;

                String grade;
                if (percentage >= 90) {
                    grade = "A+";
                } else if (percentage >= 80) {
                    grade = "A";
                } else if (percentage >= 70) {
                    grade = "B";
                } else if (percentage >= 60) {
                    grade = "C";
                } else if (percentage >= 50) {
                    grade = "D";
                } else {
                    grade = "Fail";
                }
```

```
            totalMarksTextView.setText("Total Marks: " + totalMarks);
            percentageTextView.setText("Percentage: " + String.format("%.2f", percentage)
+ "%");
            gradeTextView.setText("Grade: " + grade);
        }
    });
  }
}
```

Output: