

## 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);

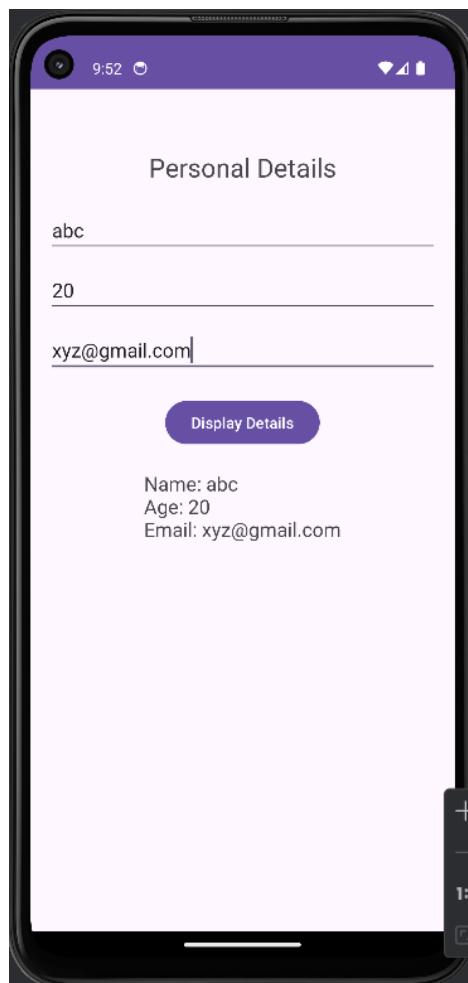
        nameEditText = findViewById(R.id.nameEditText);
        ageEditText = findViewById(R.id.ageEditText);
        emailEditText = findViewById(R.id.emailEditText);
        detailsTextView = findViewById(R.id.detailsTextView);

        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" />

</FrameLayout>
```

```

<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 {

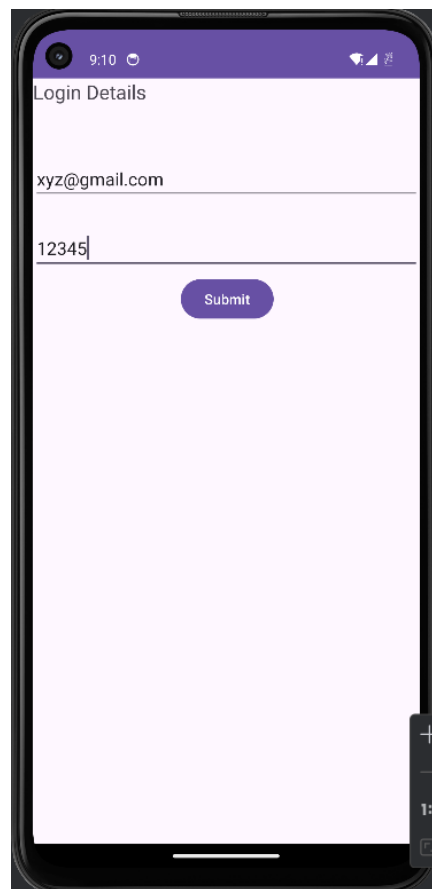
    TextView textView;
    EditText editText1, editText2;

    @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) {

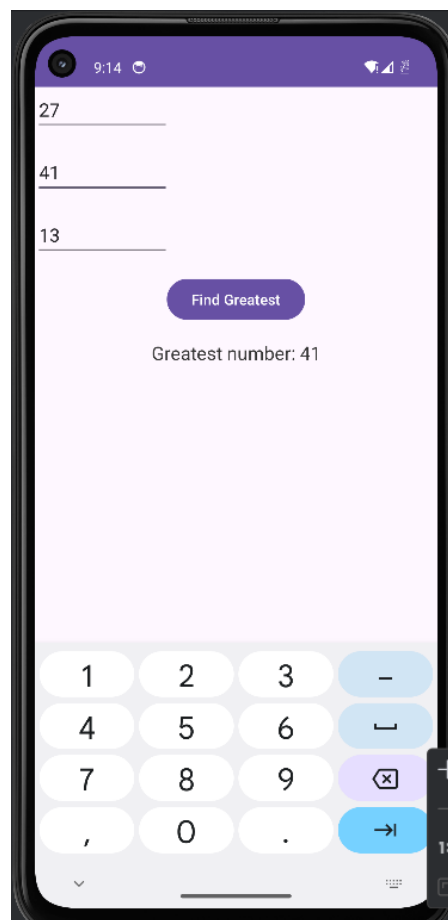
        int num1 = Integer.parseInt(num1EditText.getText().toString());
        int num2 = Integer.parseInt(num2EditText.getText().toString());
        int num3 = Integer.parseInt(num3EditText.getText().toString());

        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>

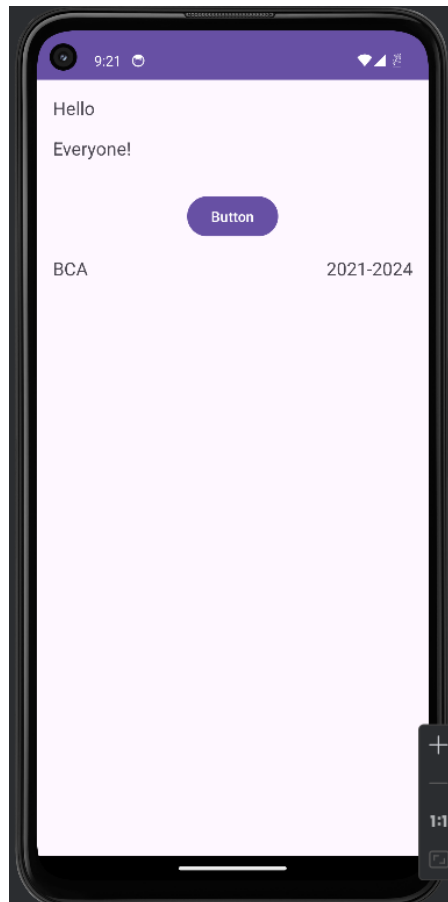
</LinearLayout>
```

#### 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" />
    </RadioGroup>
</RelativeLayout>
```

```

<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);
    }
}

```

```

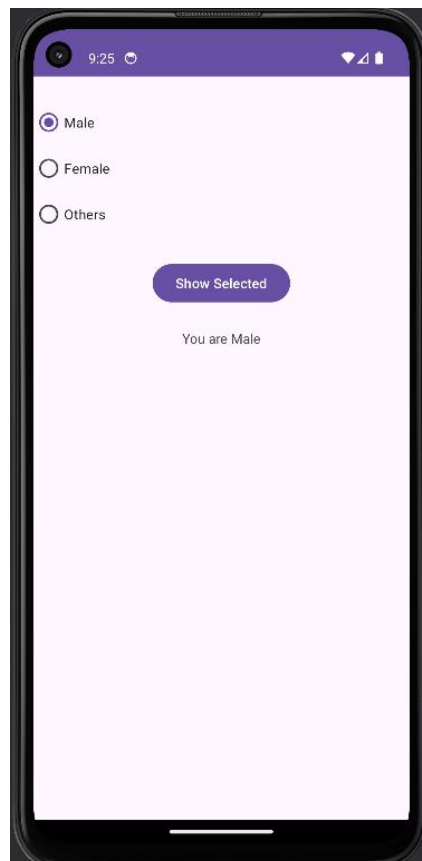
setContentView(R.layout.activity_main);

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);

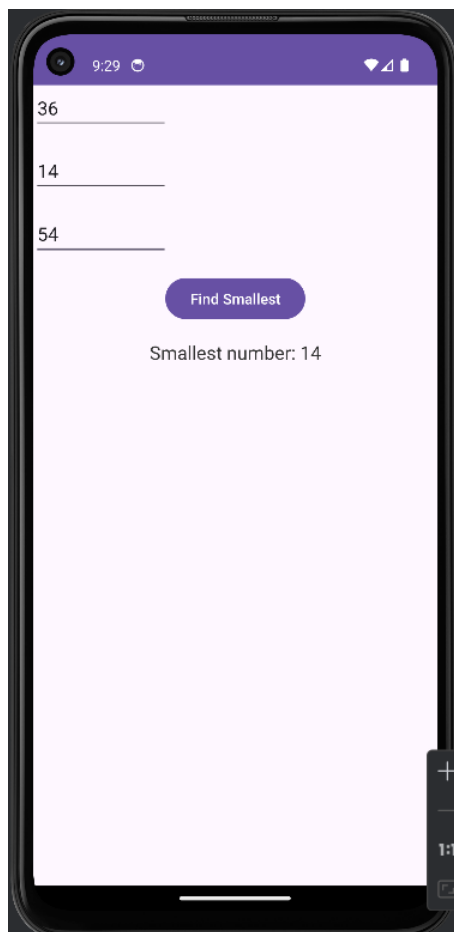
        findButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {

                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"
    />
</LinearLayout>
```

```

        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;

```



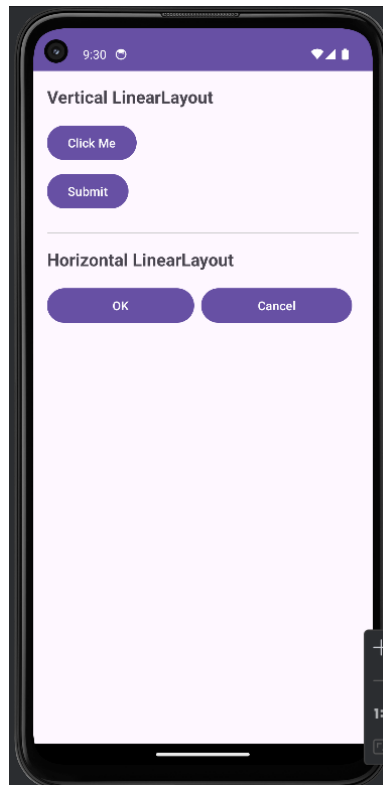
```

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:**

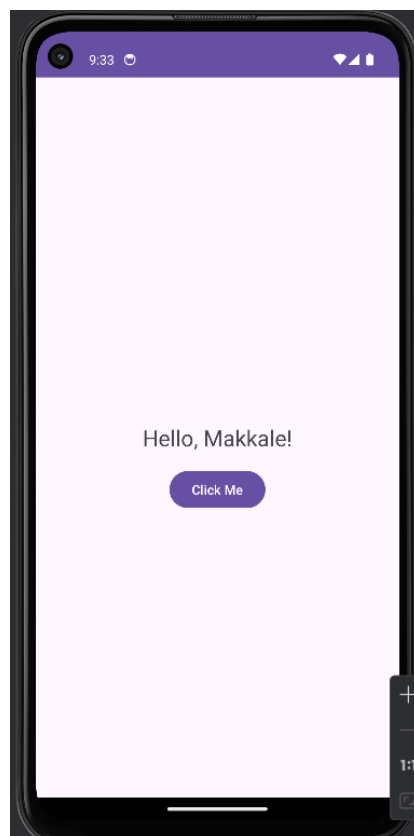
```
package com.example.relativelayout;

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:**

