



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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Experiment - 3.2

Student Name: SIMRAN ARORA
Branch: BE-CSE
Semester: 6th
Subject: MAD Lab

UID: 20BCS3400
Section/Group: 20BCS_DM-617/B
Date of Performance: 26/04/2023
Subject Code: 20CSP-356

1. AIM: Implement building blocks for Android Application using different layouts (such as linear, relative and absolute).

2. CODE:

MainActivity.java

```
package com.example.myapplication9;
import android.content.Intent;
import android.os.Bundle;
import android.widget.Button;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {

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

        Button linearLayoutButton = findViewById(R.id.linear_layout_button);
        Button relativeLayoutButton = findViewById(R.id.relative_layout_button);
        Button absoluteLayoutButton = findViewById(R.id.absolute_layout_button);
        linearLayoutButton.setOnClickListener(v -> {
            Intent intent = new Intent(MainActivity.this,
LinearLayoutActivity.class);
            startActivity(intent);
        });
        relativeLayoutButton.setOnClickListener(v -> {
            Intent intent = new Intent(MainActivity.this,
RelativeLayoutActivity.class);

            startActivity(intent);
        });

        absoluteLayoutButton.setOnClickListener(v -> {
```



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```
        Intent intent = new
Intent(MainActivity.this, AbsoluteLayoutActivity.class);
startActivity(intent);
    });
}
}
```

activity_main.xml

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <Button android:text="@string/linear_layout"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/linear_layout_button"
        android:textSize="18sp"
        android:layout_marginTop="40dp"
        android:layout_gravity="center_horizontal"
    "/>

    <Button android:text="@string/relative_layout"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/relative_layout_button"
        android:textSize="18sp"
        android:layout_gravity="center_horizontal"/>

    <Button android:text="@string/absolute_layout"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/absolute_layout_button"
        android:textSize="18sp"
        android:layout_gravity="center_horizontal"/>

    <TextView android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="16sp"
        android:layout_marginTop="40dp"
        android:layout_marginStart="10dp"
        android:text="@string/Simran" />

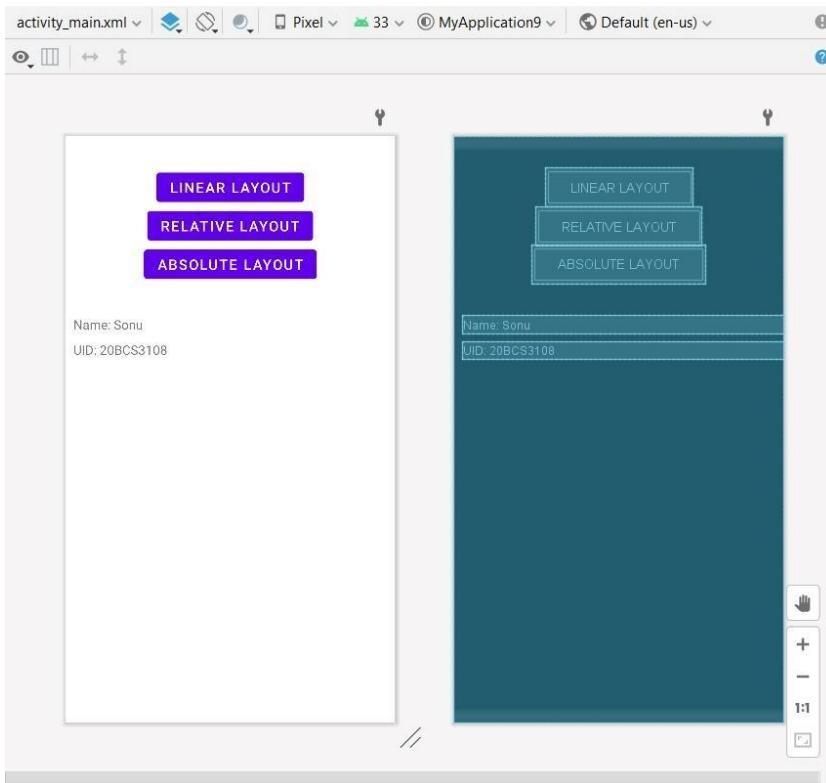
    <TextView android:id="@+id/textView2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="16sp"
        android:layout_marginTop="10dp"
```

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```
    android:layout_marginStart="10dp"
    android:text="@string/20BCS3400" />
```

```
</LinearLayout>
```



LinearLayoutActivity.java

```
package com.example.myapplication9; import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity; public class
LinearLayoutActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_linear_layout); }
}
```

activity_linear_layout.xml

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
```



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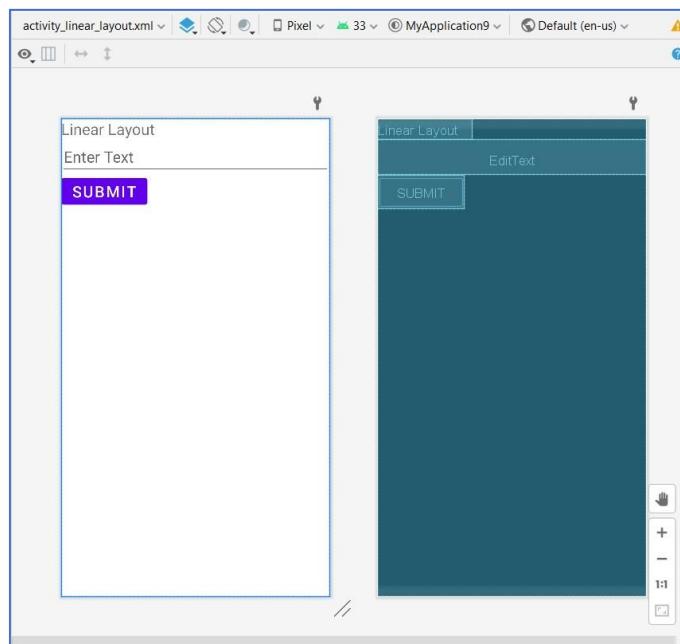
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```
<TextView
    android:text="@string/element_11"
    android:textSize="24sp"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
/>

<EditText
    android:hint="@string/element_22"
    android:textSize="24sp"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
/>

<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:textSize="24sp"
    android:text="@string/element_33" />

</LinearLayout>
```



RelativeLayoutActivity.java

```
package com.example.myapplication9; import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity; public class
RelativeLayoutActivity extends AppCompatActivity {
    @Override
```



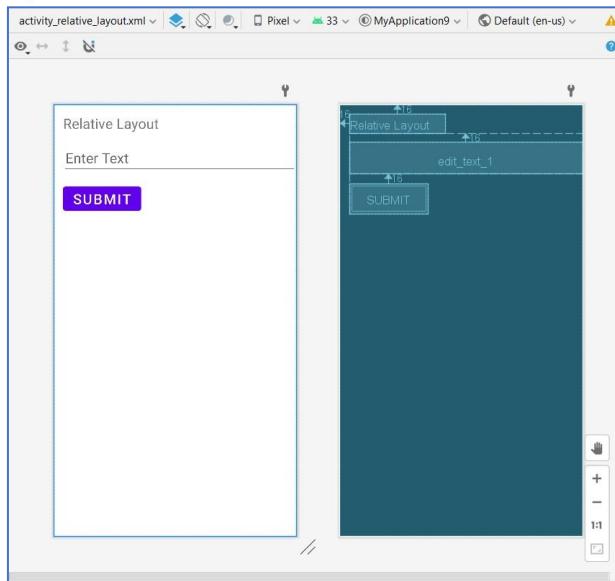
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```
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_relative_layout  
);  
}  
}
```

activity_relative_layout.xml

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent">  
  
    <TextView  
        android:text="@string/element_1"  
        android:textSize="24sp"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:id="@+id/text_view_1"  
        android:layout_alignParentTop="true"  
        android:layout_alignParentStart="true"  
        " android:layout_marginStart="16dp"  
        android:layout_marginTop="16dp"/>  
  
    <EditText android:hint="@string/element_2"  
        android:textSize="24sp"  
        android:layout_width="match_parent"  
        android:layout_height="wrap_content"  
        android:id="@+id/edit_text_1"  
        android:layout_below="@id/text_view_1"  
        android:layout_alignStart="@id/text_view_1"  
        android:layout_marginTop="16dp"/>  
  
    <Button android:text="@string/element_3"  
        android:textSize="24sp"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:id="@+id/button_1"  
        android:layout_below="@id/edit_text_1"  
        android:layout_alignStart="@id/edit_text_1"  
        android:layout_marginTop="16dp"/>  
  
</RelativeLayout>
```



AbsoluteLayoutActivity.java

```
package com.example.myapplication9; import android.os.Bundle;  
  
import androidx.appcompat.app.AppCompatActivity; public class  
  
AbsoluteLayoutActivity extends AppCompatActivity {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_absolute_layout)  
    }  
}
```

activity_absolute_layout.xml

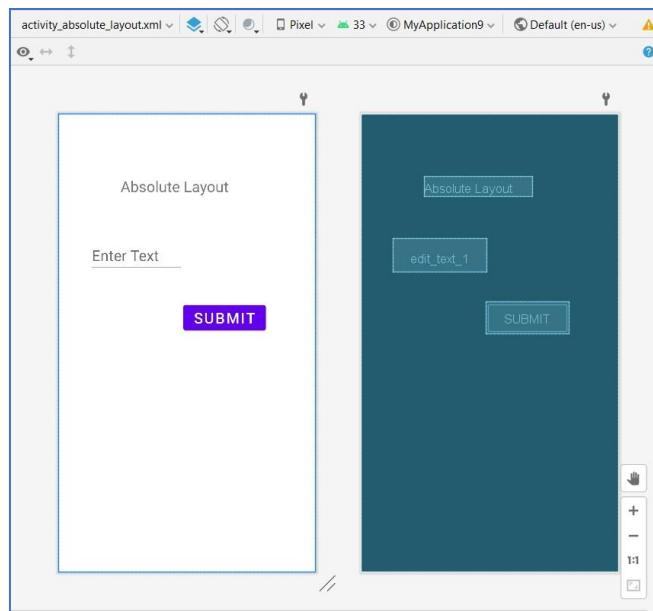
```
<?xml version="1.0" encoding="utf-8"?>  
<AbsoluteLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent">  
  
    <TextView  
        android:text="@string/element_111"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:id="@+id/text_view_1"  
        android:textSize="24sp"  
        android:layout_x="100dp"  
        android:layout_y="100dp"/>
```

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```
<EditText
    android:hint="@string/element_222"
    android:textSize="24sp"
    android:layout_width="150dp"
    android:layout_height="wrap_content"
    android:id="@+id/edit_text_1"
    android:layout_x="50dp"
    android:layout_y="200dp"/>

<Button
    android:text="@string/element_333"
    android:textSize="24sp"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/button_1"
    android:layout_x="200dp"
    android:layout_y="300dp"/>

</AbsoluteLayout>
```



3.

OUTPUT:



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