



Experiment - 3.2

Student Name: Nikhil Kumar

Branch: BE-CSE

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Subject: MAD Lab

UID: 20BCS1817

Section/Group: 20BCS_DM-716/B

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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);
    });
```



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```
absoluteLayoutButton.setOnClickListener(v -
> {
    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"
        />

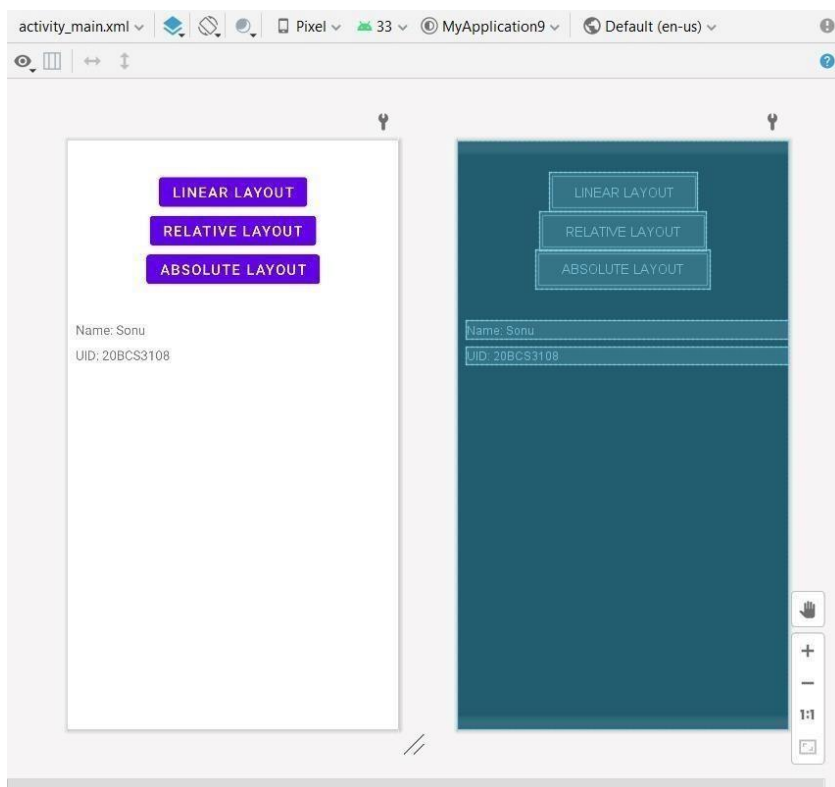
    <Button android:text="@string/relative_layout"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/relative_layout_button"
        android:textSize="18sp"
        android:layout_gravity="center_horizontal"/>

    <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"  
    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);
```



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```
        setContentView(R.layout.activity_linear_layout)
    ; }
}
```

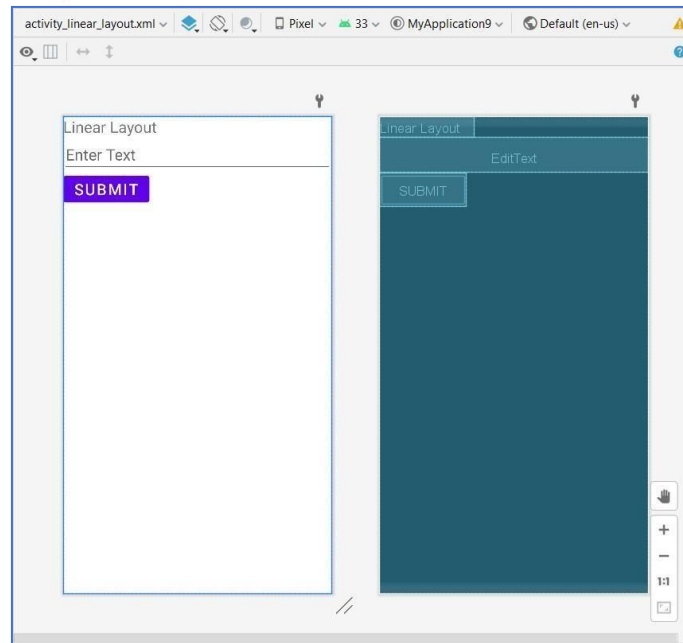
activity_linear_layout.xml

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/an
droid" android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <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
    protected void onCreate(Bundle
        savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_relative_la
            yout );
    }
}
```

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_conten
            t"
```

```

        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"/>

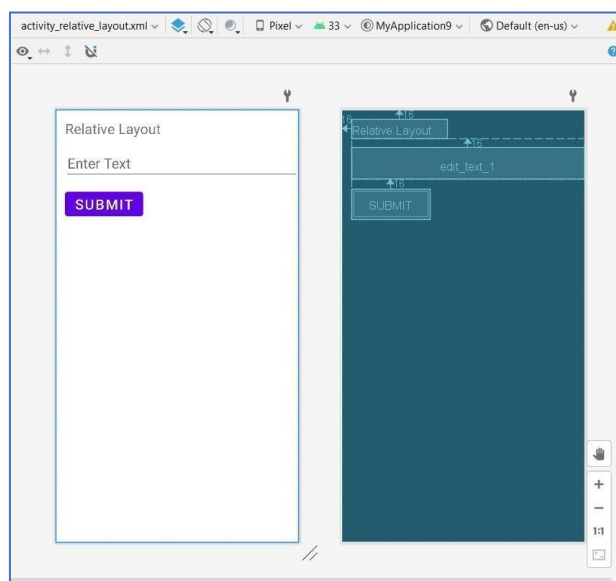
```

```

<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">

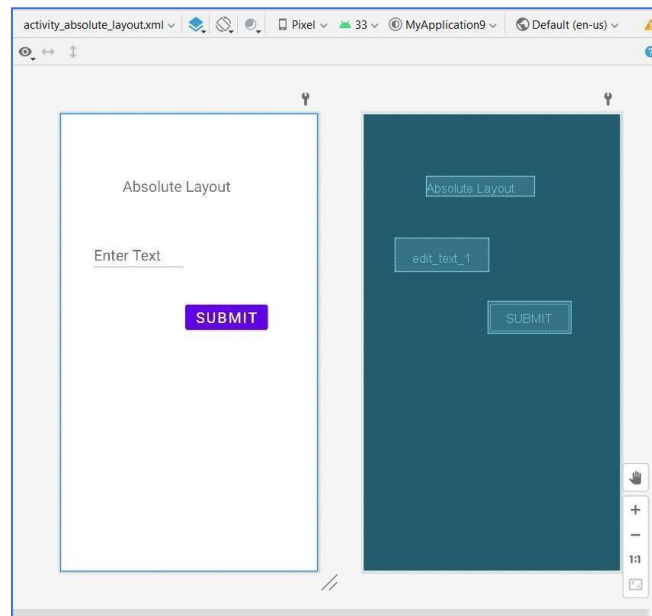
    <TextView
        android:text="@string/element_111"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/text_view_1"
        android:textSize="24sp"
        android:layout_x="100dp"
        android:layout_y="100dp"/>

    <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
```

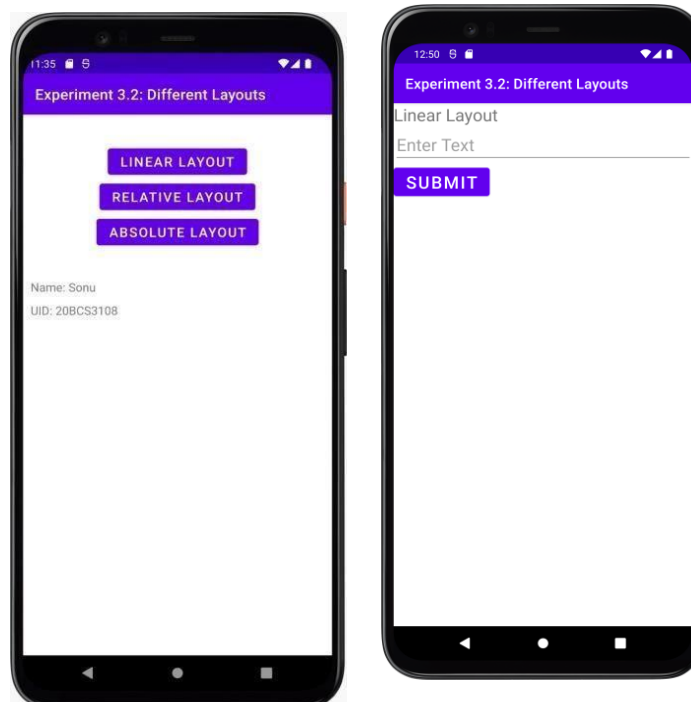
```
"  
    android:layout_height="wrap_content"  
    android:id="@+id/button_1"  
    android:layout_x="200dp"  
    android:layout_y="300dp"/>
```

```
</AbsoluteLayout>
```



3.

OUTPUT:





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