Experiment - 3.2

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Branch: BE-CSE Section/Group: 20BCS_DM-716/B Semester: 6th Date of Performance: 26/04/2023

Subject: MAD Lab 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);
                                 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);
               });
```

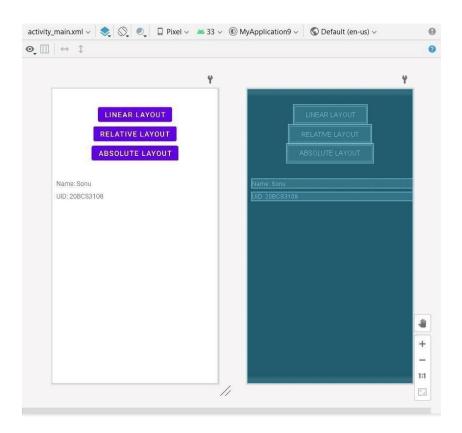
activity_main.xml

```
<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"</pre>
                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"</pre>
                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"</pre>
                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" />
```

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```
<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);
```

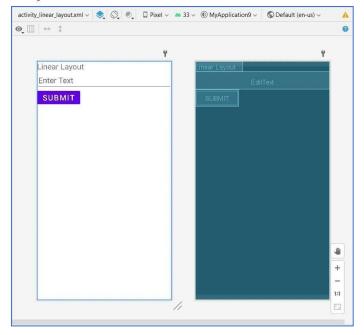
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```
setContentView(R.layout.activity_linear_layout)
; }
```

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>
```

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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_layout);
    }
}
```

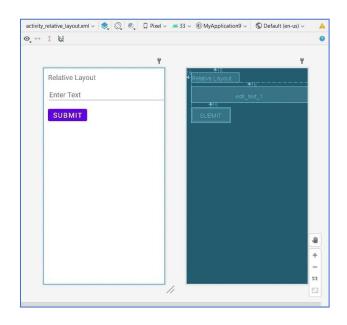
activity_relative_layout.xml

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```
android:layout height="wrap conte
    nt" android:id="@+id/text view 1"
    android:layout alignParentTop="tr
    11e"
    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"</pre>
   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
   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)
    ; }
}
```

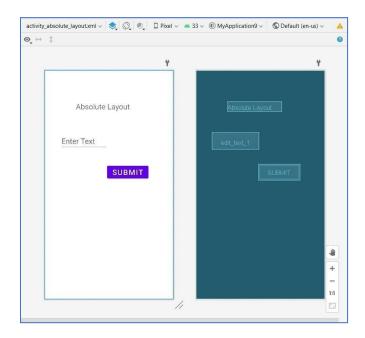
activity_absolute_layout.xml

```
<?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
```

п

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

</AbsoluteLayout>



3.

OUTPUT:



