



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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Experiment – 8

Student Name: Aman Gokul

UID: 20BCS5449

Branch: CSE

Semester: 6th

Section/Group: DM-607/A

Subject: MAD Lab

1. Aim : Create an application to represent different kinds of layouts.

2. Objective:

Understanding the different types of layouts.

3. Program:

MainActivity.java

```
package com.example.myapplication8;

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

public class MainActivity extends AppCompatActivity {

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

activity_main.xml

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

    <!-- This is a RelativeLayout -->
    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:padding="16dp">

        <ImageView
            android:id="@+id/image_view"
            android:layout_width="96dp"
            android:layout_height="96dp"
            android:src="@drawable/my_image"
            android:layout_alignParentStart="true"/>

        <TextView
            android:id="@+id/text_view"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginStart="101dp"
            android:layout_toEndOf="@id/image_view"
            android:text="Hello World!"
            android:textSize="24sp" />

    </RelativeLayout>

    <!-- This is a ConstraintLayout -->
    <androidx.constraintlayout.widget.ConstraintLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:padding="16dp">

        <TextView
            android:id="@+id/top_text_view"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Top Text View"
            android:textSize="18sp"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintStart_toStartOf="parent"/>

        <Button
            android:id="@+id/button"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toBottomOf="@id/top_text_view">
```



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```
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button"
        tools:layout_editor_absoluteX="215dp"
        tools:layout_editor_absoluteY="-8dp" />
```

```
<TextView
    android:id="@+id/bottom_text_view"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Bottom Text View"
    android:textSize="18sp"
    tools:layout_editor_absoluteX="0dp"
    tools:layout_editor_absoluteY="32dp" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

```
<!-- This is a FrameLayout -->
```

```
<FrameLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="16dp">
```

```
<ImageView
    android:id="@+id/background_image_view"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:src="@drawable/background_image"/>
```

```
<TextView
    android:id="@+id/center_text_view"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Center Text View"
    android:textSize="24sp"
    android:layout_gravity="center"/>
```

```
</FrameLayout>
```

```
</LinearLayout>
```

Output:

