1. Creating Hello World Application

- 1. Click **Start Android Studio**, a **Welcome to Android Studio** dialog box will appear. Click **New Project**, the **New Project Dialog box** appears.
- 2. Choose **Empty Views Activity** then click **Next**.
- 3. Specify the **Name** of your project, Select the **Language** as **Java.** Click **Finish** Button.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools" android:layout_width="match_parent"
android:layout height="match parent" tools:context=".MainActivity">
<TextView
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Hello World!"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout constraintStart toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:textSize="30dp"/>
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.helloworldapplication;
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);
    }
}
OUTPUT:
```



- 2. Creating an application that displays message based on the screen orientation.
- 1. Click **Start Android Studio**, a **Welcome to Android Studio** dialog box will appear. Click **New Project**, the **New Project Dialog box** appears.
- 2. Choose **Empty Views Activity** then click **Next**.
- 3. Specify the **Name** of your project, Select the **Language** as **Java.** Click **Finish** Button.

activity main.xml

```
< Relative Layout xmlns: android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/main"
android:layout width="match parent"
android:layout_height="match_parent"
tools:context=".MainActivity">
<Button android:id="@+id/por"
android:layout width="wrap content"
android:layout_height="wrap_content"
android:text="Portrait"
android:layout_centerInParent="true"/>
<Button android:id="@+id/lan"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Landscape"
android:layout_below="@id/por"
android:layout_centerInParent="true"/>
</RelativeLayout>
```

MainActivity.java

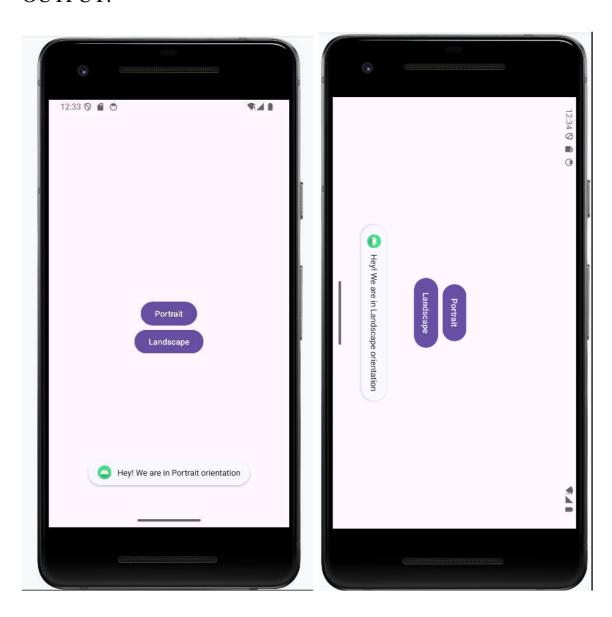
```
public class MainActivity extends AppCompatActivity {
    @Override
        protected void onCreate(Bundle savedInstanceState) {
                  super.onCreate(savedInstanceState); EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);

Button l,p;
l=findViewById(R.id.lan);
p=findViewById(R.id.lan);
p=findViewById(R.id.por);
        l.setOnClickListener(new View.OnClickListener() {
            @Override public void onClick(View v) {
                  setRequestedOrientation(ActivityInfo.SCREEN_ORIENTATION_LANDSCAPE);
            Toast.makeText(MainActivity.this, "Hey! We are in Landscape orientation",
            Toast.LENGTH_SHORT).show();
}
```

```
});
p.setOnClickListener(new View.OnClickListener() {

@Override public void onClick(View v) {
setRequestedOrientation(ActivityInfo.SCREEN_ORIENTATION_PORTRAIT);
Toast.makeText(MainActivity.this, "Hey! We are in Portrait orientation",
Toast.LENGTH_SHORT).show();
}
});
}
```

OUTPUT:



3. Create an application to develop Login window using UI controls.

- 1. Click **Start Android Studio**, a **Welcome to Android Studio** dialog box will appear. Click **New Project**, the **New Project Dialog box** appears.
- 2. Choose **Empty Views Activity** then click **Next**.
- 3. Specify the **Name** of your project, Select the **Language** as **Java.** Click **Finish** Button.

activity main.xml

activity second.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".SecondActivity"
    android:background="@drawable/loginbg">

    <TextView
        android:layout_width="match_parent"
        android:layout_width="match_parent"
        android:gravity="center"
        android:text="Explicit Intent Called"
        android:textSize="40dp"
        android:textColor="#ffffff"/>

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

MainActivity.java

OUTPUT:

