1. Develop a Simple Android Application displaying “Hello World”:

Project Name: HelloWorld

activity_main.xml:

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

        <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        android:textSize="24sp"
        android:textColor="#000000"/>

</LinearLayout>
```

MainActivity.java:

```
        package com.example.helloworld;

        import android.os.Bundle;

        import androidx.appcompat.app.AppCompatActivity;

        public class MainActivity extends AppCompatActivity {

        @Override

        protected void onCreate(Bundle savedInstanceState)

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        }
        }
```

Output:


7:03
LTE
Hello World!

2. Develop an Android Application using “Button” Component:

Project Name: Buttons

activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        android:padding="16dp">

<!-- First Button -->

        <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button 1"
        android:padding="8dp" />

<!-- Second Button -->

        <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button 2"
        android:padding="8dp" />

</LinearLayout>
```

MainActivity.java:

```
        package com.example.buttons;

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

        public class MainActivity extends AppCompatActivity {
        @Override
        protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);

        }
        }
```

Output:

3. Develop an Android Application by implementing “Vertical Linear Layout”:

Project Name: VerticalLinearLayout

activity_main.xml:

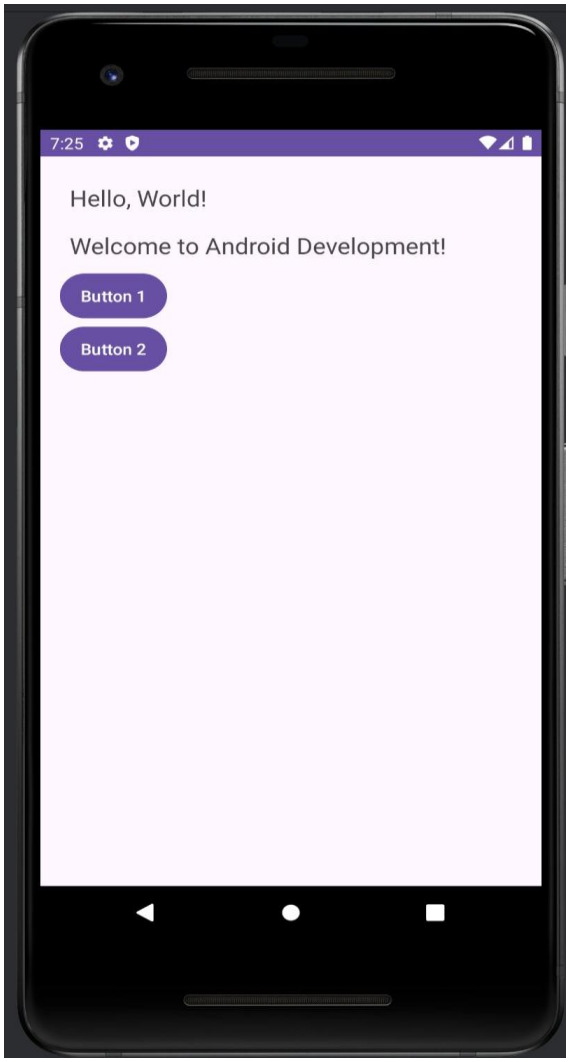
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        android:padding="16dp">

        <TextView
        android:id="@+id/textview1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello, World!"
        android:textSize="20sp"
        android:padding="8dp" />

        <TextView
        android:id="@+id/textview2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Welcome to Android Development!"
        android:textSize="20sp"
        android:padding="8dp" />

<!-- First Button -->

        <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button 1"
        android:padding="8dp" />

<!-- Second Button -->

        <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" a
```

```
        ndroid:text="Button 2"
        android:padding="8dp" />

</LinearLayout>
```

MainActivity.java:

```
        package com.example.verticallinearlayout;

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

        public class MainActivity extends AppCompatActivity {
        @Override
        protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main); // Set the content view to the
        XML layout  with the vertical LinearLayout

        }
        }
```

Output:



4. Develop an Android Application by implementing “Horizontal Linear Layout”:

Project Name: HorizontalLinearLayout

activity_main.xml:

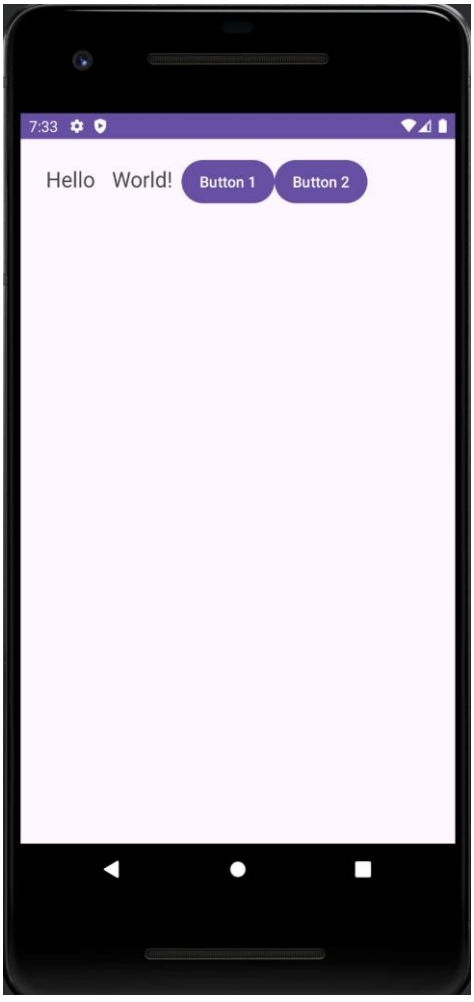
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="horizontal"
        android:padding="16dp">

        <TextView
        android:id="@+id/textview1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello"
        android:textSize="20sp"
        android:padding="8dp" />

        <TextView
        android:id="@+id/textview2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="World!"
        android:textSize="20sp"
        android:padding="8dp" />

<!-- First Button -->

        <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button 1"
        android:padding="8dp" />

<!-- Second Button -->

        <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:text="Button 2"
        android:padding="8dp" />

</LinearLayout>
```

MainActivity.java:

```
        package com.example.horizontallinearlayout;

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

        public class MainActivity extends AppCompatActivity {
        @Override
        protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main); // Set the content view to the
        XML layout with the horizontal LinearLayout

        }
        }
```

Output:



ImageView: It is used to display images in an app. It allows you to show pictures, icons, or other graphics in your application's interface.

5. Develop an Android Application using "ImageView" Component:

Project Name: ImageViews

activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        android:gravity="center"
        android:padding="16dp">

<!-- ImageView -->

        <ImageView
        android:id="@+id/imageView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:src="@drawable/sample_image"
        android:contentDescription="Sample Image" />

</LinearLayout>
```

MainActivity.java:

```
        package com.example.imageviews;

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

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


        }
        }
```

Output:


6:31
300 x 300 pixel image converter
Image Converter
https://www.top10questions.online/
1:1

Edit Text: It is a user interface component that allows users to input and edit text. It's similar to a text box in other programming environments.

6. Develop an Android Application using "EditText" Component:

Project Name: EditTexts

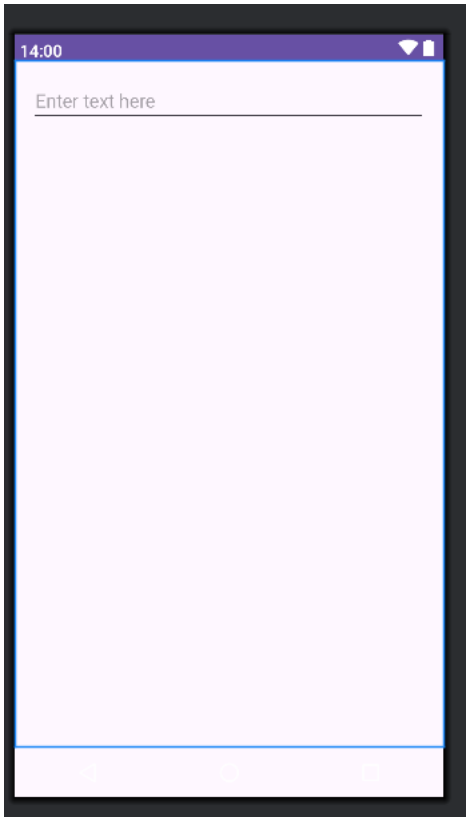
activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        android:padding="16dp">

   <!-- EditText -->

        <EditText
           android:id="@+id/editText"
           android:layout_width="match_parent"
           android:layout_height="wrap_content"
           android:hint="Enter text here"
           android:inputType="text" />

</LinearLayout>
```

MainActivity.java:

```
package com.example.edittexts;

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

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



}
}
```

Output:



Radio Button: It is commonly used UI component in Android that allow users to select one option from a set of mutually exclusive choices.

7. Develop an Android Application using "Radio Button" Component:

Project Name: RadioButtonExample

activity_main.xml:

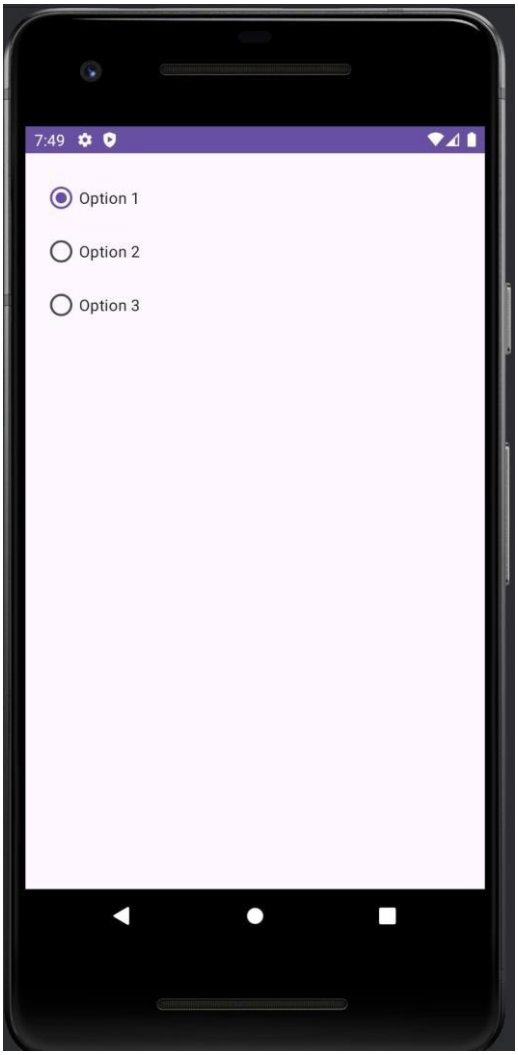
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        android:padding="16dp">

<!-- RadioGroup to group RadioButtons -->

        <RadioGroup
        android:id="@+id/radioGroup"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content">

<!-- RadioButton options -->

        <RadioButton
        android:id="@+id/radioButton1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Option 1" />

        <RadioButton
        android:id="@+id/radioButton2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Option 2" />

        <RadioButton
        android:id="@+id/radioButton3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Option 3" />

        </RadioGroup>
```

</LinearLayout>

MainActivity.java:

```
package com.example.radiobuttonexample;

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

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

// No implementation action needed

}
}
```

Output:



Task:

Develop an android Application to display your college name in the Centre of the screen.