

Name: Tejas Dhole

Roll no: 42

Div: A

Title: 8. Design an Android application using Spinner

String.xml

```
<resources>
    <string name="app_name">exp 8</string>
    <string-array name="currencies">
        <item>US Dollar</item>
        <item>Euro</item>
        <item>Yen</item>
        <item>Dinar</item>
        <item>Dirham</item>
    </string-array>
</resources>
```

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="20dp"
    android:gravity="top|center_horizontal"
    android:background="#FAFAFA">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <TextView
            android:id="@+id/textView2"
            android:layout_width="match_parent"
            android:layout_height="42dp"
            android:layout_marginTop="100px"
            android:layout_weight="1"
            android:text="Enter Value in Rs"
            android:textSize="60px" />

        <EditText
```

```
            android:id="@+id/editTextRs"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:layout_marginTop="100px"
                android:layout_weight="1"
                android:hint="Enter Value"
                android:inputType="numberDecimal"
                android:padding="10dp"
                android:textSize="60px" />
        </LinearLayout>
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
```

```
<TextView
    android:id="@+id/textView3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="42dp"
    android:layout_weight="1"
    android:text="Select Currency"
    android:textSize="60px" />
```

```
<Spinner
    android:id="@+id/spinnerCurrency"
    android:layout_width="match_parent"
    android:layout_height="125px"
    android:layout_marginTop="100px"
    android:layout_weight="1" />
```

```
</LinearLayout>
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
```

```
<Button
    android:id="@+id/btnConvert"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="100px"
```

```

        android:backgroundTint="#6200EE"
        android:padding="10dp"
        android:text="Convert"
        android:textColor="@android:color/white"
        android:textSize="60px" />
</LinearLayout>

```

```

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="131dp"
    android:layout_marginTop="80px"
    android:orientation="horizontal">

```

```

    <TextView
        android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="37dp"
        android:layout_marginTop="80px"
        android:layout_weight="1"
        android:text="Converted Value:"
        android:textSize="60px" />

```

```

    <TextView
        android:id="@+id/textView4"
        android:layout_width="match_parent"
        android:layout_height="85dp"
        android:layout_marginTop="80px"
        android:layout_weight="1"
        android:text="TextView"
        android:textSize="60px" />

```

```

</LinearLayout>

```

```

</LinearLayout>

```

MainActivity.java

```

package com.techmania.exp8;

```

```

import android.os.Bundle;
import android.view.View;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.TextView;

```

```

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;

```

```

import androidx.core.view.WindowInsetsCompat;

```

```

public class MainActivity extends AppCompatActivity {
    EditText e;
    Spinner s;
    Button b;
    TextView Result;

```

```

    double usdRate = 0.011;
    double euroRate = 0.0096;
    double yenRate = 1.66;
    double dinarRate = 0.003;
    double dirhamRate = 0.041;

```

```

    @Override
    protected void onCreate(Bundle
        savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);

```

```

        e=findViewById(R.id.editTextRs);
        s=findViewById(R.id.spinnerCurrency);
        b=findViewById(R.id.btnConvert);
        Result=findViewById(R.id.textView4);

```

```

        ArrayAdapter<CharSequence> a=

```

```

        ArrayAdapter.createFromResource(this,R.array.currenc
        ies, android.R.layout.simple_spinner_item);

```

```

        a.setDropDownViewResource(android.R.layout.simple
        _spinner_dropdown_item);
        s.setAdapter(a);

```

```

        b.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String input = e.getText().toString();
                if (input.isEmpty()){
                    Result.setText("Enter Value!!!!");
                    return;
                }

```

```

                double Rs=Double.parseDouble(input);
                double result=0.0;
                String

```

```
currency=s.getSelectedItem().toString();
```

```
switch (currency) {
    case "US Dollar":
        result = Rs * usdRate;
        break;
    case "Euro":
        result = Rs * euroRate;
        break;
    case "Yen":
        result = Rs * yenRate;
        break;
    case "Dinar":
        result = Rs * dinarRate;
        break;
    case "Dirham":
        result = Rs * dirhamRate;
        break;
}
Result.setText(String.format("%.2f %s",
    result, currency));
}
});
}
```

