Teoría clase otros componentes

Realizar la siguiente App



Código 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">  
  
 <LinearLayout  
 android:id="@+id/linearLayout"  
 android:layout\_width="409dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="24dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="650dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent">  
  
 <TextView  
 android:id="@+id/tvmensaje1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:layout\_weight="1"  
 android:gravity="center"  
 android:text="Viajes XYZ"  
 android:textSize="30dp" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/linearLayout2"  
 android:layout\_width="409dp"  
 android:layout\_height="120dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="1dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="517dp"  
 android:orientation="vertical"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout">  
  
 <RadioGroup  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
 <RadioButton  
 android:id="@+id/rbcartagena"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:checked="true"  
 android:text=" Cartagena"  
 android:textSize="25dp" />  
  
 <RadioButton  
 android:id="@+id/rbamazonas"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:text=" Amazonas"  
 android:textSize="25dp" />  
  
 <RadioButton  
 android:id="@+id/rbpuntacana"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:text=" Punta Cana"  
 android:textSize="25dp" />  
 </RadioGroup>  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/linearLayout3"  
 android:layout\_width="409dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="1dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="435dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout2">  
  
 <TextView  
 android:id="@+id/tvciudad"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:layout\_weight="1"  
 android:gravity="center"  
 android:text="600000"  
 android:textSize="30dp" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/linearLayout4"  
 android:layout\_width="409dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="1dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="354dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout3">  
  
 <EditText  
 android:id="@+id/etcantidad"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:layout\_weight="1"  
 android:ems="10"  
 android:gravity="center"  
 android:hint="Cantidad de personas"  
 android:inputType="number"  
 android:textSize="30dp" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/linearLayout5"  
 android:layout\_width="409dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="1dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="272dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout4">  
  
 <CheckBox  
 android:id="@+id/cbiva"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:layout\_weight="1"  
 android:text=" IVA"  
 android:textSize="25dp" />  
  
 <TextView  
 android:id="@+id/tviva"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="80dp"  
 android:layout\_weight="1"  
 android:gravity="center"  
 android:text="0"  
 android:textSize="25dp" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/linearLayout6"  
 android:layout\_width="409dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="1dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="191dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout5">  
  
 <TextView  
 android:id="@+id/tvtotal"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:layout\_weight="1"  
 android:gravity="center"  
 android:text="0"  
 android:textSize="30dp" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/linearLayout7"  
 android:layout\_width="409dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="1dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="109dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout6">  
  
 <Button  
 android:id="@+id/btcalcular"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:layout\_weight="1"  
 android:textSize="30dp"  
 android:text="Calcular" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="409dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="1dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="28dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout7">  
  
 <Button  
 android:id="@+id/btcancelar"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:layout\_weight="1"  
 android:textSize="30dp"  
 android:text="Cancelar" />  
 </LinearLayout>  
</androidx.constraintlayout.widget.ConstraintLayout>

Código Java

public class MainActivity extends AppCompatActivity {  
  
 TextView jtvciudad,jtviva,jtvtotal;  
 EditText jetcantidad;  
 RadioButton jrbcartagena,jrbamazonas,jrbpuntacana;  
 CheckBox jcbiva;  
 Button jbtcalcular,jbtcancelar;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 //Esconder el titulo por defecto  
 getSupportActionBar().hide();  
 //Asociar objetos Java con objetos Xml  
 jtvciudad=findViewById(R.id.*tvciudad*);  
 jtviva=findViewById(R.id.*tviva*);  
 jtvtotal=findViewById(R.id.*tvtotal*);  
 jetcantidad=findViewById(R.id.*etcantidad*);  
 jrbcartagena=findViewById(R.id.*rbcartagena*);  
 jrbamazonas=findViewById(R.id.*rbamazonas*);  
 jrbpuntacana=findViewById(R.id.*rbpuntacana*);  
 jcbiva=findViewById(R.id.*cbiva*);  
 jbtcalcular=findViewById(R.id.*btcalcular*);  
 jbtcancelar=findViewById(R.id.*btcancelar*);  
 }

public void Calcular\_viaje(View view){  
 String cantidad;  
 cantidad=jetcantidad.getText().toString();  
 if (cantidad.isEmpty()){  
 Toast.*makeText*(this, "Digite la cantidad de personas", Toast.*LENGTH\_SHORT*).show();  
 jetcantidad.requestFocus();  
 }  
 else{  
 int cantidad\_personas, valor\_ciudad;  
 float valor\_iva,valor\_viaje;  
 cantidad\_personas=Integer.*parseInt*(cantidad);  
 if (jrbcartagena.isChecked()){  
 valor\_ciudad=600000;  
 jtvciudad.setText("600000");  
 }  
 else{  
 if (jrbamazonas.isChecked()){  
 valor\_ciudad=2000000;  
 jtvciudad.setText("2000000");  
 }  
 else{  
 valor\_ciudad=3000000;  
 jtvciudad.setText("3000000");  
 }  
 }  
 if (jcbiva.isChecked()){  
 valor\_iva=(cantidad\_personas \* valor\_ciudad) \* 19/100;  
 jtviva.setText(String.*valueOf*(valor\_iva));  
 }  
 else{  
 jtviva.setText("0");  
 valor\_iva=0;  
 }  
 valor\_viaje=cantidad\_personas \* valor\_ciudad + valor\_iva;  
 jtvtotal.setText(String.*valueOf*(valor\_viaje));  
 }  
}  
  
public void Cancelar(View view){  
 jetcantidad.setText("");  
 jtvtotal.setText("0");  
 jtviva.setText("0");  
 jtvciudad.setText("600000");  
 jrbcartagena.setChecked(true);  
 jcbiva.setChecked(false);  
 jetcantidad.requestFocus();  
}

}