Tarea final hito 3

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1. Diseño de un Onboarding:

Adapters

```java
package com.example.examenhito3.Adapters;

import androidx.annotation.NonNull;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentPagerAdapter;

import com.example.examenhito3.Onboarding.n1;
import com.example.examenhito3.Onboarding.n2;
import com.example.examenhito3.Onboarding.n3;


public class OnboardingAdapter extends FragmentPagerAdapter
{
    public OnboardingAdapter(FragmentManager fm)
    {
        super(fm);
    }

    @NonNull
    @Override
    public Fragment getItem(int position)
    {
        switch (position)
        {
            case 0:
                return new n1();
            case 1:
                return new n2();
            case 2:
                return new n3();

            default:
                return null;
        }
    }

    @Override
    public int getCount()
    {
        return 3;
    }
}
```
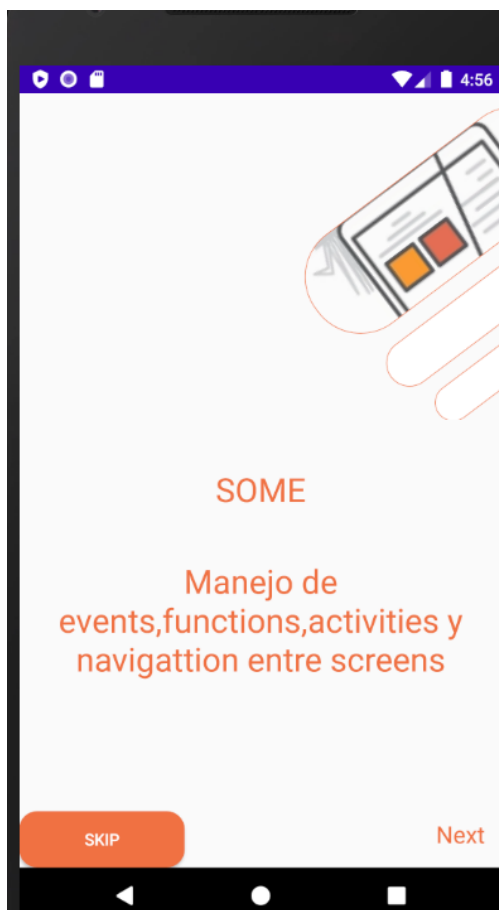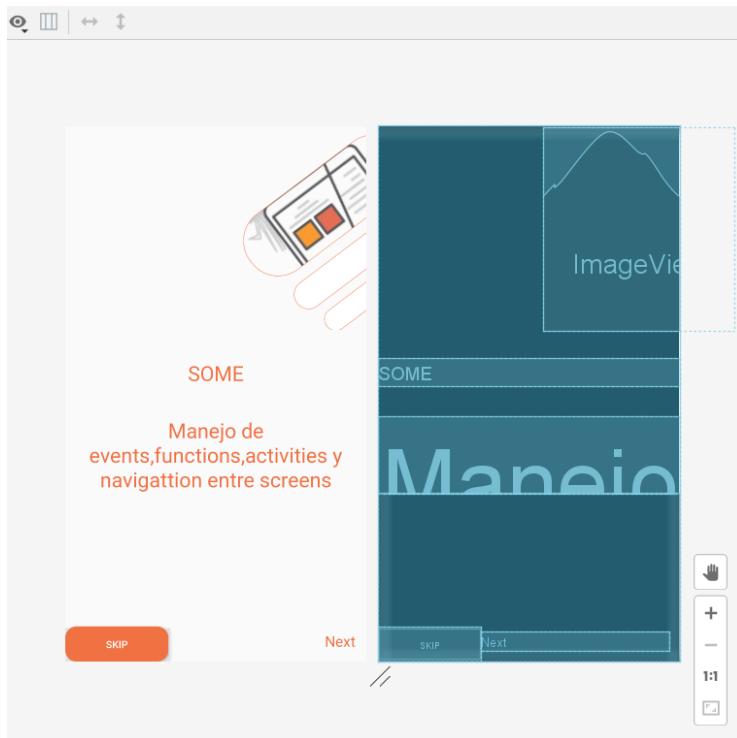
Primera pantalla

Código:

Xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
```

```xml
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Onboarding.n1"
    android:orientation="vertical">
<ImageView
    android:id="@+id/ima"
    android:layout_width="wrap_content"
    android:layout_height="277dp"
    android:layout_gravity="center"
    android:layout_marginLeft="150dp"
    android:layout_marginTop="1dp"
    android:scaleType="centerCrop"
    android:src="@drawable/img1" />
<TextView
    android:id="@+id/textTitle1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:fontFamily="sans-serif"
    android:gravity="center"
    android:text="@string/titulo"
    android:textColor="@color/colorPrimary"
    android:textSize="28sp" />
<TextView
    android:id="@+id/textlar"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:fontFamily="sans-serif"
    android:gravity="center"
    android:text="@string/manejo"
    android:textColor="@color/colorPrimary"
    android:textSize="28sp" />
<LinearLayout
    android:id="@+id/layoutNext"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="horizontal">
    <Button
        android:id="@+id/skip1"
        android:layout_width="141dp"
        android:layout_height="wrap_content"
        android:layout_gravity="bottom|start"
        android:background="@drawable/stylesnt"
        android:text="@string/skip"
        android:textColor="@color/colorWhite">
    </Button>
    <TextView
        android:id="@+id/textInc"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="bottom|start"
        android:layout_marginRight="15dp"
        android:layout_marginBottom="2dp"
        android:layout_weight="1"
        android:clickable="true"
        android:focusable="true"
        android:fontFamily="sans-serif"
```

```xml
                android:gravity="bottom|end"
                android:text="@string/done"
                android:textColor="@color/colorPrimary"
                android:textSize="20sp"/>
        </LinearLayout>
    </LinearLayout>
```

Java

```java
package com.example.examenhito3.Onboarding;

import android.os.Bundle;

import androidx.fragment.app.Fragment;
import androidx.viewpager.widget.ViewPager;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.TextView;

import com.example.examenhito3.R;

/**
 * A simple {@link Fragment} subclass.
 */
public class n1 extends Fragment {
    private ViewPager viewPager;
    private View view;
  TextView    textNextFace;
  Button Next;
    public n1() {
        // Required empty public constructor
    }


    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        //initialize viewpager from main activity
        initializeInflater(inflater, container);

        //initialize components
        initializeComponents();

        //add click event to text Next and prev text
        addClickNextAndPrev();

        //return
        return view;
    }

    public void initializeInflater(LayoutInflater inflater, ViewGroup
container) {
        view = inflater.inflate(R.layout.fragment_n1, container, false);
    }

    public void initializeComponents() {
```

```java
        viewPager = getActivity().findViewById(R.id.viewPagerContainer);

        textNextFace = view.findViewById(R.id.textInc);
        Next=view.findViewById(R.id.skip1);
    }

    public void addClickNextAndPrev() {

        textNextFace.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                viewPager.setCurrentItem(1);
            }
        });
        Next.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                viewPager.setCurrentItem(2);
            }
        });
    }
}
```

Segunda Pantalla 2

Código:

Xml:

```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"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Onboarding.n2"
    android:orientation="vertical">
    <ImageView
        android:id="@+id/ima"
        android:layout_width="wrap_content"
        android:layout_height="277dp"
        android:layout_gravity="center"
        android:layout_marginLeft="150dp"
        android:layout_marginTop="1dp"
        android:scaleType="centerCrop"
```

```xml
            android:src="@drawable/img2" />
<TextView
    android:id="@+id/textTitle1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:fontFamily="sans-serif"
    android:gravity="center"
    android:text="@string/titulo2"
    android:textColor="@color/colorPrimary"
    android:textSize="28sp" />
<TextView
    android:id="@+id/textlar"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:fontFamily="sans-serif"
    android:gravity="center"
    android:text="@string/manejo2"
    android:textColor="@color/colorPrimary"
    android:textSize="28sp" />
<TextView
    android:id="@+id/gest"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:fontFamily="sans-serif"
    android:gravity="center"
    android:text="@string/estion"
    android:textColor="@color/colorPrimary"
    android:textSize="28sp" />
<LinearLayout
    android:id="@+id/layoutNext"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="horizontal">
    <Button
        android:id="@+id/skip2"
        android:layout_width="141dp"
        android:layout_height="wrap_content"
        android:layout_gravity="bottom|start"
        android:background="@drawable/stylesnt"
        android:text="@string/skip"
        android:textColor="@color/colorWhite">
    </Button>
    <TextView
        android:id="@+id/textInc2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="bottom|start"
        android:layout_marginRight="15dp"
        android:layout_marginBottom="2dp"
        android:layout_weight="1"
        android:clickable="true"
        android:focusable="true"
        android:fontFamily="sans-serif"
        android:gravity="bottom|end"
        android:text="@string/done"
        android:textColor="@color/colorPrimary"
```

```xml
                    android:textSize="20sp" />
    </LinearLayout>
</LinearLayout>
```

Java:

```java
package com.example.examenhito3.Onboarding;

import android.os.Bundle;

import androidx.fragment.app.Fragment;
import androidx.viewpager.widget.ViewPager;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.TextView;

import com.example.examenhito3.R;

/**
 * A simple {@link Fragment} subclass.
 */
public class n2 extends Fragment {
    private ViewPager viewPager;
    private View view;
    TextView textNextFace2;
    Button Next2;
    public n2() {
        // Required empty public constructor
    }


    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        initializeInflater(inflater, container);

        //initialize components
        initializeComponents();

        //add click event to text Next and prev text
        addClickNextAndPrev();

        //return
        return view;
    }
    public void initializeInflater(LayoutInflater inflater, ViewGroup
container) {
        view = inflater.inflate(R.layout.fragment_n2, container, false);
    }

    public void initializeComponents() {
        viewPager = getActivity().findViewById(R.id.viewPagerContainer);

        textNextFace2 = view.findViewById(R.id.textInc2);
        Next2=view.findViewById(R.id.skip2);
    }
```
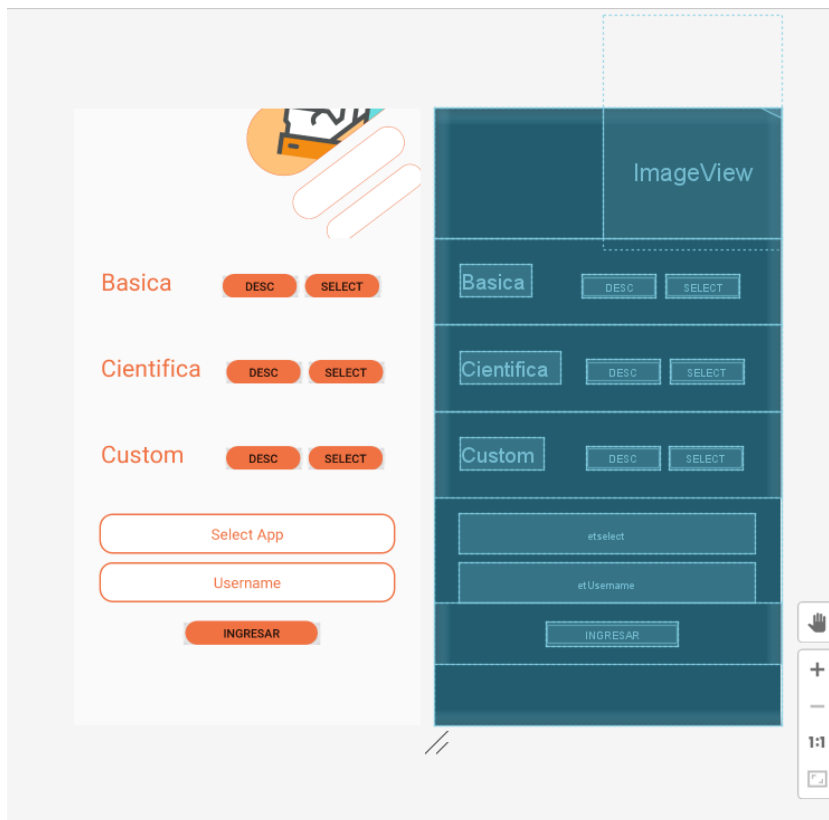
```java
public void addClickNextAndPrev() {

    textNextFace2.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            viewPager.setCurrentItem(2);
        }
    });
    Next2.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            viewPager.setCurrentItem(2);
        }
    });
}
}
```
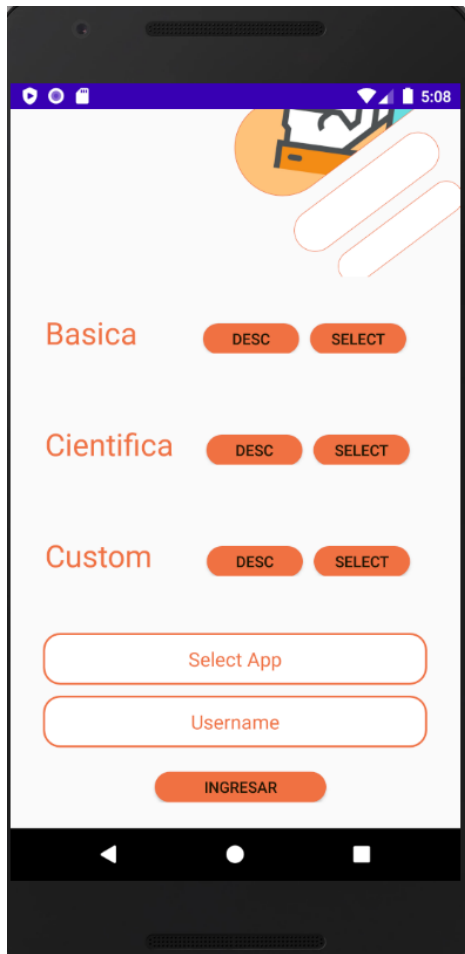
Tercera pantalla

Código:

Xml:

```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"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Onboarding.n1"
    android:orientation="vertical">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="154dp"
        android:gravity="center"
        android:orientation="horizontal">
        <ImageView
            android:id="@+id/ima"
            android:layout_width="wrap_content"
            android:layout_height="277dp"
            android:layout_gravity="center"
            android:layout_marginLeft="200dp"
            android:layout_marginBottom="50dp"
            android:scaleType="centerCrop"
            android:src="@drawable/img3" />
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
```

```xml
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:padding="32dp">
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:fontFamily="sans-serif"
            android:text="@string/asica"
            android:textColor="@color/colorPrimary"
            android:textSize="28sp" />
        <Button
            android:id="@+id/d1"
            android:layout_width="wrap_content"
            android:layout_height="28dp"
            android:layout_marginLeft="60dp"
            android:background="@drawable/stylesnt"
            android:text="@string/Dex" />
        <Button
            android:id="@+id/s1"
            android:layout_width="wrap_content"
            android:layout_height="28dp"
            android:layout_marginLeft="10dp"
            android:background="@drawable/stylesnt"
            android:text="@string/select" />
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:padding="32dp">
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:fontFamily="sans-serif"
            android:text="@string/asica1"
            android:textColor="@color/colorPrimary"
            android:textSize="28sp" />
        <Button
            android:id="@+id/d2"
            android:layout_width="wrap_content"
            android:layout_height="28dp"
            android:layout_marginLeft="30dp"
            android:background="@drawable/stylesnt"
            android:text="@string/Dex" />
        <Button
            android:id="@+id/s2"
            android:layout_width="wrap_content"
            android:layout_height="28dp"
            android:layout_marginLeft="10dp"
            android:background="@drawable/stylesnt"
            android:text="@string/select" />
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:padding="32dp">
        <TextView
            android:layout_width="wrap_content"
```

```xml
            android:layout_height="wrap_content"
            android:fontFamily="sans-serif"
            android:text="@string/asica2"
            android:textColor="@color/colorPrimary"
            android:textSize="28sp" />
        <Button
            android:id="@+id/d3"
            android:layout_width="wrap_content"
            android:layout_height="28dp"
            android:layout_marginLeft="50dp"
            android:background="@drawable/stylesnt"
            android:text="@string/Dex" />
        <Button
            android:id="@+id/s3"
            android:layout_width="wrap_content"
            android:layout_height="28dp"
            android:layout_marginLeft="10dp"
            android:background="@drawable/stylesnt"
            android:text="@string/select" />
    </LinearLayout>
    <EditText
        android:id="@+id/etselect"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_marginLeft="30dp"
        android:layout_marginTop="20dp"
        android:layout_marginRight="30dp"
        android:background="@drawable/et_style"
        android:fontFamily="sans-serif"
        android:hint="@string/selecapp"
        android:textColorHint="@color/colorPrimary"
        android:inputType="textEmailAddress"
        android:textAlignment="center">
    </EditText>
    <EditText
        android:id="@+id/etUsername"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_marginLeft="30dp"
        android:layout_marginTop="10dp"
        android:layout_marginRight="30dp"
        android:background="@drawable/et_style"
        android:fontFamily="sans-serif"
        android:hint="@string/username"
        android:textColorHint="@color/colorPrimary"
        android:textAlignment="center">
    </EditText>
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal"
            android:padding="22dp"
            android:gravity="center">
            <Button
                android:id="@+id/btnIn"
                android:layout_width="157dp"
                android:layout_height="28dp"
```

```xml
                android:layout_marginLeft="10dp"
                android:background="@drawable/stylesnt"
                android:text="@string/in" />
        </LinearLayout>
</LinearLayout>
```

Java:

```java
package com.example.examenhito3.Onboarding;

import android.content.Intent;
import android.os.Bundle;

import androidx.fragment.app.Fragment;
import androidx.viewpager.widget.ViewPager;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

import com.example.examenhito3.App.CalcBasica;
import com.example.examenhito3.App.CalcCientiffica;
import com.example.examenhito3.App.CalcCustom;
import com.example.examenhito3.R;


/**
 * A simple {@link Fragment} subclass.
 */

public class n3 extends Fragment
{

    private ViewPager viewPager;
    private View view;
    private Button  bti,d1,d2,d3,s1,s2,s3;
    private EditText etsel,etUser;

    public n3()
    {
        // Required empty public constructor
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
Bundle savedInstanceState)
    {
        //initialize viewpager from main activity
        initializeInflater(inflater, container);

        //initialize components
        initializeComponents();

        //add click event to text Next and prev text
        eventClickAction();
```

```java
        //return
        return view;
    }

    public void initializeInflater(LayoutInflater inflater, ViewGroup
container)
    {
        view = inflater.inflate(R.layout.fragment_n3, container, false);
    }

    public void initializeComponents()
    {
        viewPager = getActivity().findViewById(R.id.viewPagerContainer);


        d1 = view.findViewById(R.id.d1);
        d2 = view.findViewById(R.id.d2);
        d3 = view.findViewById(R.id.d3);
        s1 = view.findViewById(R.id.s1);
        s2 = view.findViewById(R.id.s2);
        s3 = view.findViewById(R.id.s3);
        etsel = view.findViewById(R.id.etselect);
        etUser = view.findViewById(R.id.etUsername);
        bti = view.findViewById(R.id.btnIn);
    }

    public void eventClickAction()
    {
d1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Toast.makeText(getActivity(), "Calculadora con operaciones simples
básica", Toast.LENGTH_SHORT).show();
    }
});
        d2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Toast.makeText(getActivity(), "Calculadora con operaciones
avanzadas", Toast.LENGTH_SHORT).show();
            }
        });
        d3.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Toast.makeText(getActivity(), "Calculadora con operaciones
para programadores", Toast.LENGTH_SHORT).show();
            }
        });
        s1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
              etsel.setText("Basica");
            }
        });
        s2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
```

```java
                    etsel.setText("Cientifica");
            }
        });
        s3.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                etsel.setText("Custom");
            }
        });

        bti.setOnClickListener(new View.OnClickListener()
        {
            @Override
            public void onClick(View v)
            {
                String selct = etsel.getText().toString().trim();
                String username = etUser.getText().toString().trim();

                if(username.equals("") || selct .equals(""))
                {
                    Toast.makeText(getActivity(), "Ingrese Select/Username",
Toast.LENGTH_SHORT).show();
                }
                else if(selct.equals("Custom"))
                {
                    Intent intent = new Intent(getActivity(),
CalcCustom.class);
                    intent.putExtra("US", username);
                    intent.putExtra("AS", selct);
                    startActivity(intent);
                    getActivity().finish();
                }
                else if(selct.equals("Basica"))
                {
                    Intent intent = new Intent(getActivity(),
CalcBasica.class);
                    intent.putExtra("US", username);
                    intent.putExtra("AS", selct);
                    startActivity(intent);
                    getActivity().finish();
                }
                else if(selct.equals("Cientifica"))
                {
                    Intent intent = new Intent(getActivity(),
CalcCientiffica.class);
                    intent.putExtra("US", username);
                    intent.putExtra("AS", selct);
                    startActivity(intent);
                    getActivity().finish();
                }
                else{
                    Toast.makeText(getActivity(), "Seleccione alguna
calculadora", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}
```

Strings:

```xml
<string name="titulo">SOME</string>
<string name="titulo2">DEFENSA HITO 3</string>
<string name="manejo2">Univ:Samuel Maldonado</string>
<string name="estion">Gestion:2020</string>
<string name="done">Next</string>>
<string name="skip">Skip</string>
<string name="asica">Basica</string>
<string name="asica1">Cientifica</string>
<string name="asica2">Custom</string>
<string name="selecapp">Select App</string>
<string name="username">Username</string>
<string name="in">Ingresar</string>
<string name="select">Select</string>
<string name="Dex">Desc</string>
<string name="manejo">Manejo de events,functions,activities y navigattion
entre screens</string>
<string name="mas">+</string>
<string name="menos">-</string>
<string name="multi">*</string>
<string name="di">/</string>
<string name="nume1">1</string>
<string name="nume2">2</string>
<string name="nume3">3</string>
<string name="nume4">4</string>
<string name="nume5">5</string>
<string name="nume6">6</string>
<string name="nume7">7</string>
<string name="nume8">8</string>
<string name="nume9">9</string>
<string name="nume0">0</string>
<string name="masmenos">+/-</string>
<string name="punto">.</string>
<string name="iual">=</string>
<string name="mass">+</string>
<string name="menoss">-</string>
<string name="multii">*</string>
<string name="dis">/</string>
<string name="c">C</string>
<string name="c2">C2</string>
<string name="flecha">(-</string>
<string name="cuadrado">x2</string>
<string name="porcentaje">%</string>
<string name="R">R</string>
```

Colores:

```xml
<color name="colorWhite">#FFFFFF</color>
<color name="colorPrimary">#F07243
</color>
<color name="colorPrimaryDark">#3700B3</color>
<color name="colorAccent">#03DAC5</color>
```

Estilos:

```xml
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android">
```

```xml
    <solid android:color="@color/colorPrimary"/>
    <corners android:radius="15dp"/>
    <stroke android:width="1dp" android:color="@color/colorPrimary"/>
</shape>


<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android">
    <solid android:color="@color/colorAccent"/>
    <corners android:radius="15dp"/>
    <stroke android:width="1dp" android:color="@color/colorAccent"/>
</shape>


<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android">

    <solid android:color="@color/colorWhite"></solid>
    <corners android:radius="15dp"></corners>
    <stroke android:width="2dp" android:color="@color/colorPrimary"></stroke>
    <padding android:top="12dp" android:bottom="12dp" android:left="12dp"
android:right="12dp"></padding>

</shape>
```
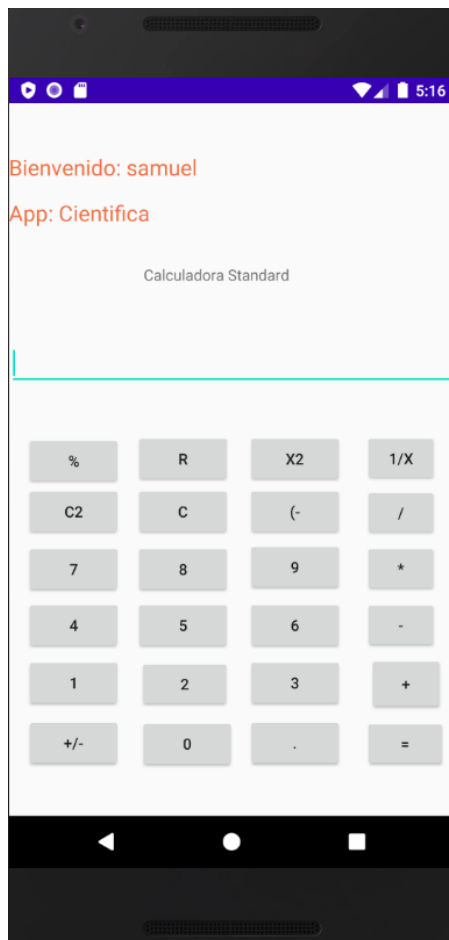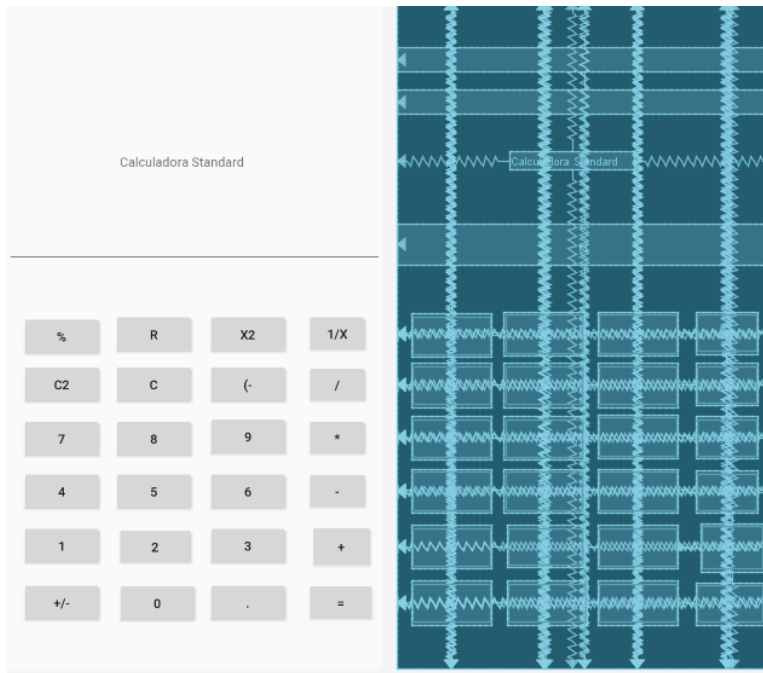
2. CALCULADORA CIENTIFICA

Xml:

```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:id="@+id/tvShowU1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textColor="@color/colorPrimary"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.072">
    </TextView>
    <TextView
        android:id="@+id/tvShowS1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textColor="@color/colorPrimary"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.139">
    </TextView>
```

```xml
<Button
    android:id="@+id/numc2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/c2"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.049"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.579" />
<Button
    android:id="@+id/multi"
    android:layout_width="67dp"
    android:layout_height="47dp"
    android:text="@string/multi"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.953"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.665" />
<Button
    android:id="@+id/num6"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/nume6"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.681"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.751" />
<Button
    android:id="@+id/num9"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/nume9"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.681"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.663" />
<Button
    android:id="@+id/num4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/nume4"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.049"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.751" />
<Button
    android:id="@+id/num5"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```xml
        android:text="@string/nume5"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.362"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.751" />
    <Button
        android:id="@+id/masmenos"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/masmenos"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.049"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.929" />
    <Button
        android:id="@+id/numc"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/c"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.362"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.579" />
    <Button
        android:id="@+id/num8"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/nume8"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.362"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.666" />
        <EditText
            android:id="@+id/t1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintHorizontal_bias="0.0"
            app:layout_constraintLeft_toLeftOf="parent"
            app:layout_constraintRight_toRightOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.355" />
    <Button
        android:id="@+id/num1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/nume1"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.049"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
```

```xml
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.838" />
    <Button
        android:id="@+id/num3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/nume3"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.681"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.838" />
    <Button
        android:id="@+id/num2"
        android:layout_width="84dp"
        android:layout_height="47dp"
        android:text="@string/nume2"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.368"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.839" />
    <Button
        android:id="@+id/cuadrado"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/cuadrado"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.681"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.499" />
    <Button
        android:id="@+id/numflechita"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/flecha"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.681"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.579" />
    <Button
        android:id="@+id/sum"
        android:layout_width="69dp"
        android:layout_height="52dp"
        android:layout_marginStart="24dp"
        android:text="@string/mas"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.918"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintStart_toEndOf="@+id/num3"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.842" />
```

```xml
<Button
    android:id="@+id/num0"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/nume0"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.373"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.93" />
<Button
    android:id="@+id/punto"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/punto"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.681"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.929" />

<Button
    android:id="@+id/igual"
    android:layout_width="75dp"
    android:layout_height="47dp"
    android:text="="
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.976"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.929" />

<Button
    android:id="@+id/unox"
    android:layout_width="67dp"
    android:layout_height="47dp"
    android:text="1/x"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.953"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.498" />

<Button
    android:id="@+id/num7"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/nume7"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.049"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.666" />
```

```xml
<Button
    android:id="@+id/resta"
    android:layout_width="67dp"
    android:layout_height="47dp"
    android:text="@string/menos"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.953"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.75" />

<Button
    android:id="@+id/div"
    android:layout_width="67dp"
    android:layout_height="47dp"
    android:text="@string/di"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.953"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.58" />

<Button
    android:id="@+id/numr"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/R"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.362"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.499" />

<Button
    android:id="@+id/porcentaje2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/porcentaje"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.049"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.502" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Calculadora Standard"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.45"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.233" />
```

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

Java:

```java
package com.example.examenhito3.App;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.text.InputType;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

import com.example.examenhito3.R;


public class CalcCientiffica extends AppCompatActivity implements
View.OnClickListener
{
    private EditText txt;
    private Button
btn1,btn2,btsuma,btnigual,btn4,btn5,btn6,btn7,btn8,btn9,btn0,btn3,btresta,btm
ulti,btdi,btcuadrado,btporcentaje,btmasmenos,flech,nmc,nmc2,raiz,punto,x1;
    private TextView tvShowU1,tvShows1;
    double Resultado;
    int operacion;
    public double opera1;
    public double opera2;
    public double opera3=1;
    public double opera4=0;
    public double resul;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_calc_cientiffica);
        initializeVariables();
    }
    public void  initializeVariables(){
        tvShowU1 = findViewById(R.id.tvShowU1);
        tvShows1 = findViewById(R.id.tvShowS1);
        String username = getIntent().getStringExtra("US");
        String select = getIntent().getStringExtra("AS");
        String msg1 = "App: " + select;
        String msg = "Bienvenido: " + username;

        tvShowU1.setText(msg);
        tvShows1.setText(msg1);

        btn1 = findViewById(R.id.num1);
        btn2=findViewById(R.id.num2);
        btn3 = findViewById(R.id.num3);
        btn4=findViewById(R.id.num4);
        btn5 = findViewById(R.id.num5);
        btn6=findViewById(R.id.num6);
```

```java
        btn7 = findViewById(R.id.num7);
        btn8=findViewById(R.id.num8);
        btn9 = findViewById(R.id.num9);
        btn0=findViewById(R.id.num0);
        btsuma= findViewById(R.id.sum);
        btresta = findViewById(R.id.resta);
        btmulti=findViewById(R.id.multi);
        btdi=findViewById(R.id.div);
        txt = findViewById(R.id.t1);
        btnigual=findViewById(R.id.igual);
        btcuadrado=findViewById(R.id.cuadrado);
        btporcentaje=findViewById(R.id.porcentaje2);
        btmasmenos=findViewById(R.id.masmenos);
        flech=findViewById(R.id.numflechita);
        nmc=findViewById(R.id.numc);
        nmc2=findViewById(R.id.numc2);
        raiz=findViewById(R.id.numr);
        punto=findViewById(R.id.punto);
        x1 = findViewById(R.id.unox);
//txt.setInputType(InputType.TYPE_NULL);
        btnigual.setOnClickListener(this);
        btn1.setOnClickListener(this);
        btn2.setOnClickListener(this);
        btn3.setOnClickListener(this);
        btn4.setOnClickListener(this);
        btn5.setOnClickListener(this);
        btn6.setOnClickListener(this);
        btn7.setOnClickListener(this);
        btn8.setOnClickListener(this);
        btn9.setOnClickListener(this);
        btn0.setOnClickListener(this);
        btmasmenos.setOnClickListener(this);
        btsuma.setOnClickListener(this);
        btresta.setOnClickListener(this);
        btmulti.setOnClickListener(this);
        btdi.setOnClickListener(this);
        btcuadrado.setOnClickListener(this);
        btporcentaje.setOnClickListener(this);
        flech.setOnClickListener(this);
        nmc.setOnClickListener(this);
        nmc2.setOnClickListener(this);
        raiz.setOnClickListener(this);
        punto.setOnClickListener(this);
        x1.setOnClickListener(this);
    }

    @Override
    public void onClick(View v) {
        switch (v.getId()) {
            case R.id.num1:
                String dato = txt.getText().toString();
                dato=dato+"1";
                txt.setText(dato);
                break;
            case R.id.num2:
                String dato1 = txt.getText().toString();
                dato1=dato1+"2";
                txt.setText(dato1);
                break;
```

```java
case R.id.num3:
    String dato2 = txt.getText().toString();
    dato2=dato2+"3";
    txt.setText(dato2);
    break;
case R.id.num4:
    String dato3 = txt.getText().toString();
    dato3=dato3+"4";
    txt.setText(dato3);
    break;
case R.id.num5:
    String dato4 = txt.getText().toString();
    dato4=dato4+"5";
    txt.setText(dato4);
    break;
case R.id.num6:
    String dato5 = txt.getText().toString();
    dato5=dato5+"6";
    txt.setText(dato5);
    break;
case R.id.num7:
    String dato6 = txt.getText().toString();
    dato6=dato6+"7";
    txt.setText(dato6);
    break;
case R.id.num8:
    String dato7 = txt.getText().toString();
    dato7=dato7+"8";
    txt.setText(dato7);
    break;
case R.id.num9:
    String dato8 = txt.getText().toString();
    dato8=dato8+"9";
    txt.setText(dato8);
    break;
case R.id.num0:
    String dato9 = txt.getText().toString();
    dato9=dato9+"0";
    txt.setText(dato9);
    break;
case R.id.punto:

    txt.setText(".");
    break;
case R.id.cuadrado:
    cuadra();
    break;
case R.id.masmenos:
    Double op,res;
    String auxi = txt.getText().toString();
    op=Double.parseDouble(auxi);
    res = op*(-1);
    txt.setText(""+res);

    break;
case R.id.sum:
    suma();
    break;
```

```java
        case R.id.resta:
            resta();
            break;
        case R.id.multi:
            multip();
            break;
        case R.id.div:
            divic();
            break;
        case R.id.igual:

            signos();

            break;
        case R.id.porcentaje2:
            porcen();
            break;
        case R.id.numflechita:
            String dlt = txt.getText().toString();

            dlt = dlt.substring(0, dlt.length() - 1);
            if(dlt.length()>0) {
                txt.setText(dlt);
                dlt = dlt.substring(0, dlt.length() - 1);
            }

            break;
        case R.id.numc:
            txt.setText("");
            break;
        case R.id.numc2:
            txt.setText("");
            break;
        case R.id.numr:
            Double res1,op2,op3;
            String auxi3 = txt.getText().toString();
            op2=Double.parseDouble(auxi3);
            op3=  Math.sqrt(op2);
            txt.setText(""+op3);
            break;
        case R.id.unox:
            Double res2,op4,op5;
            String auxi4 = txt.getText().toString();
            op5=Double.parseDouble(auxi4);
            op4=1/op5;
            txt.setText(""+op4);
            break;
        }
    }


    public void signos()
    {
        try
        {
            String auxi2 = txt.getText().toString();
            opera2 = Double.parseDouble(auxi2);
```

```java
            }
            catch (NumberFormatException e){
            }

            txt.setText("");
            if(operacion==1)
            {
                resul=opera1+opera2;
            }
            else if(operacion==2)
            {
                resul=opera1-opera2;
            }
            else if(operacion==3)
            {
                resul=opera1*opera2;
            }
            else if(operacion==4)
            {
                if(operacion==0)
                {
                    txt.setText("Error al ingresar");
                }
                else
                {
                    resul=opera1/opera2;
                }
            }
            else if(operacion==5)
            {

                resul=opera1;


            }
            else if(operacion==6)
            {

                resul=opera1*opera2/100;


            }
            txt.setText(""+resul);
            opera1=0.0;
            opera3=1.0;
            opera4=0;
    }

    public void suma()
    {
        String auxi = txt.getText().toString();
        opera1 = opera1 +Double.parseDouble(auxi);
        txt.setText("");
        operacion = 1;
    }
    public void resta()
    {
        opera1=0;
        if(opera4<1){
```

```java
            String auxi = txt.getText().toString();
            opera1 = Double.parseDouble(auxi)-opera1;
            opera3=opera1;
        }
        else if(opera4>0){
            String auxi = txt.getText().toString();
            opera1 = opera3-Double.parseDouble(auxi);
        }

        opera4++;
        txt.setText("");
        operacion = 2;
    }

public void multip()
{

    opera1=1;
    String auxi = txt.getText().toString();

    opera1 =opera3*Double.parseDouble(auxi);
    opera3=opera1;


    txt.setText("");
    operacion = 3;
}
public void divic()
{


    if(opera4<1){
        String auxi = txt.getText().toString();
        opera1 = Double.parseDouble(auxi)/opera3;
        opera3=opera1;
    }
    else{
        String auxi = txt.getText().toString();
        opera1 = opera3/Double.parseDouble(auxi);
        opera3=opera1;
    }


    opera4++;
    txt.setText("");
    operacion = 4;
}
public void cuadra(){
    try {


        String auxi = txt.getText().toString();
        Double a = Double.parseDouble(auxi);
        opera1 = Math.pow(a,2);
    }
    catch (NumberFormatException e){
    }
    txt.setText("");
    operacion = 5;
```

```java
        }
    public void porcen(){
        try {


            String auxi = txt.getText().toString();
            opera1 =Double.parseDouble(auxi);
        }
        catch (NumberFormatException e){
        }
        txt.setText("");
        operacion = 6;
    }

}
```

Link del repositorio donde se encuentra el proyecto y el video

https://github.com/SamuelAlejandroMaldonado/som/tree/master/hito3/Hito3TareaFinal