

# Давиденко Роман ИС213

## 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/resultText"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:gravity="end"

        android:padding="24dp"

        android:text="0"

        android:textSize="32sp" />

    <GridLayout

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:columnCount="4"

        android:rowCount="5"

        android:layout_marginTop="16dp">

        <Button android:text="7" android:onClick="onNumberClick" />

        <Button android:text="8" android:onClick="onNumberClick" />
```

```
<Button android:text="9" android:onClick="onNumberClick" />
<Button android:text="/" android:onClick="onOperatorClick" />

<Button android:text="4" android:onClick="onNumberClick" />
<Button android:text="5" android:onClick="onNumberClick" />
<Button android:text="6" android:onClick="onNumberClick" />
<Button android:text="*" android:onClick="onOperatorClick" />

<Button android:text="1" android:onClick="onNumberClick" />
<Button android:text="2" android:onClick="onNumberClick" />
<Button android:text="3" android:onClick="onNumberClick" />
<Button android:text="-" android:onClick="onOperatorClick" />

<Button android:text="C" android:onClick="onClearClick" />
<Button android:text="0" android:onClick="onNumberClick" />
<Button android:text="=" android:onClick="onEqualsClick" />
<Button android:text="+" android:onClick="onOperatorClick" />

</GridLayout>
</LinearLayout>
```

## MainActivity:

```
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;
```

```
public class MainActivity extends AppCompatActivity {

    private TextView resultText;

    private String currentOperator;

    private double firstNumber, secondNumber;

    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        resultText = findViewById(R.id.resultText);

        currentOperator = "";

        firstNumber = 0;

        secondNumber = 0;

    }

    public void onNumberClick(View view) {

        Button button = (Button) view;

        String buttonText = button.getText().toString();

        if (resultText.getText().toString().equals("0")) {

            resultText.setText(buttonText);

        } else {

            resultText.append(buttonText);

        }

    }

    public void onOperatorClick(View view) {
```

```
Button button = (Button) view;

currentOperator = button.getText().toString();

firstNumber = Double.parseDouble(resultText.getText().toString());

resultText.setText("0");

}

public void onEqualsClick(View view) {

    secondNumber = Double.parseDouble(resultText.getText().toString());

    double result = 0;

    switch (currentOperator) {

        case "+":

            result = firstNumber + secondNumber;

            break;

        case "-":

            result = firstNumber - secondNumber;

            break;

        case "*":

            result = firstNumber * secondNumber;

            break;

        case "/":

            if (secondNumber != 0) {

                result = firstNumber / secondNumber;

            } else {

                resultText.setText("Error");

                return;

            }

            break;

    }

}
```

```
    resultText.setText(String.valueOf(result));  
}
```

```
public void onClearClick(View view) {  
    resultText.setText("0");  
    firstNumber = 0;  
    secondNumber = 0;  
    currentOperator = "";  
}  
}
```