







```
Bytecode/Disassembly | PlayGame/Source | MainActivity/Source | R/Source

import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    Button button;
    Context ctx;
    int l0;
    int l1;
    TextView t1;
    TextView t2;
    TextView t3;
    EditText te;

    public MainActivity() {
        super();
        this.l0 = 0;
        this.l1 = 0xF423F;
    }

    public void buttonClick(View arg5) {
        int v5 = this.l0;
        if(v5 != this.l1) {
            ++v5;
            this.l0 = v5;
            this.t2.setText(String.format("%d / %d", Integer.valueOf(v5), Integer.valueOf(this.l1)));
        }
        else {
            this.t2.setText(0x7F08002C);
            this.t3.setText(PlayGame.getFlag(this.te.getText().toString(), this.ctx));
        }
    }

    protected void onCreate(Bundle arg4) {
        super.onCreate(arg4);
        this setContentView(0x7F09001C);
        this.t1 = this.findViewById(0x7F070089);
        this.t2 = this.findViewById(0x7F07008A);
        this.t3 = this.findViewById(0x7F07008B);
        this.te = this.findViewById(0x7F070036);
        this.ctx = this.getApplicationContext();
        this.t2.setText(String.format("%d / %d", Integer.valueOf(this.l0), Integer.valueOf(this.l1)));
    }
}
```

### Task1:

There's a condition loop here. It requires you click the button until the 0 increases to 999999. I just replace the "if-ge" in smali by "goto", unconditional jump to where we want.

```
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package com.pore.play4fun;

import android.content.Context;

public class PlayGame {
    static {
        System.loadLibrary("LoadTask");
    }

    public PlayGame() {
        super();
    }

    public static String getFlag(String arg8, Context arg9) {
        StringBuilder v9 = new StringBuilder("pore");
        StringBuilder v1 = new StringBuilder("pore");
        StringBuilder v2 = new StringBuilder("pore");
        StringBuilder v3 = new StringBuilder("pore");
        v9.setCharAt(0, ((char)(v9.charAt(0) - 4)));
        v9.setCharAt(1, ((char)v9.charAt(1)));
        v9.setCharAt(2, ((char)(v9.charAt(2) + 5)));
        v9.setCharAt(3, ((char)(v9.charAt(3) - 1)));
        v1.setCharAt(0, ((char)(v1.charAt(0) + 4)));
        v1.setCharAt(1, ((char)(v1.charAt(1) + 10)));
        v1.setCharAt(2, ((char)(v1.charAt(2) - 13)));
        v1.setCharAt(3, ((char)(v1.charAt(3) + 7)));
        v2.setCharAt(0, ((char)(v2.charAt(0) - 4)));
        v2.setCharAt(1, ((char)(v2.charAt(1) - 6)));
        v2.setCharAt(2, ((char)(v2.charAt(2) - 11)));
        v2.setCharAt(3, ((char)(v2.charAt(3) + 3)));
        v3.setCharAt(0, ((char)(v3.charAt(0) + 2)));
        v3.setCharAt(1, ((char)(v3.charAt(1) - 10)));
        v3.setCharAt(2, ((char)(v3.charAt(2) + 1)));
        v3.setCharAt(3, ((char)(v3.charAt(3) + 14)));
        if(arg8.equals("").concat(v2.toString()).concat(v1.toString()).concat(v9.toString()).concat(v3.toString())) {
            return "You got it! Task2 finished.\nTry to call sth here";
        }
        return "Welcome to task2";
    }

    public static native String skdaga(String arg0) {
    }
}
```

Task2:

It's about the token.

By reading the reverse Java code of smali, I found that the token is calculated by ascii from "poreporeporepore" to "lightyellowdress".

So I just input the "lightyellowdress" and find it true.

```

    invoke-virtual {p0, p1}, Ljava/lang/String;->equals(Ljava/lang/Object;)Z

    move-result p1

    if-eqz p1, :cond_0

    invoke-static {p0}, Lcom/pore/play4fun/PlayGame;->skdaga(Ljava/lang/String;)Ljava/lang/String;

    move-result-object v2

    const-string p0, "You got it! Task2 finished.\nTry to call sth here\n"

    invoke-virtual {p0, v2}, Ljava/lang/String;->concat(Ljava/lang/String;)Ljava/lang/String;

    move-result-object p0

    return-object p0

:cond_0
    const-string p0, "Welcome to task2"

    return-object p0
end method

.method public static native skdaga(Ljava/lang/String;)Ljava/lang/String;
end method

```

Task3:

I found a weird method called skdaga in smali, and it's a native method. I guess it will give me the secret answer. I reverse the .so in library and found it a C method which turn the inputted string to another string. So I change the flow and input the token into the method, and got the secret answer "flag{SmaliIsCoollll}.