# First of all, decompress the APK file with :

```
7z x BasicAndroidRE1.apk
```

# Then, we need 2 Linux tools :

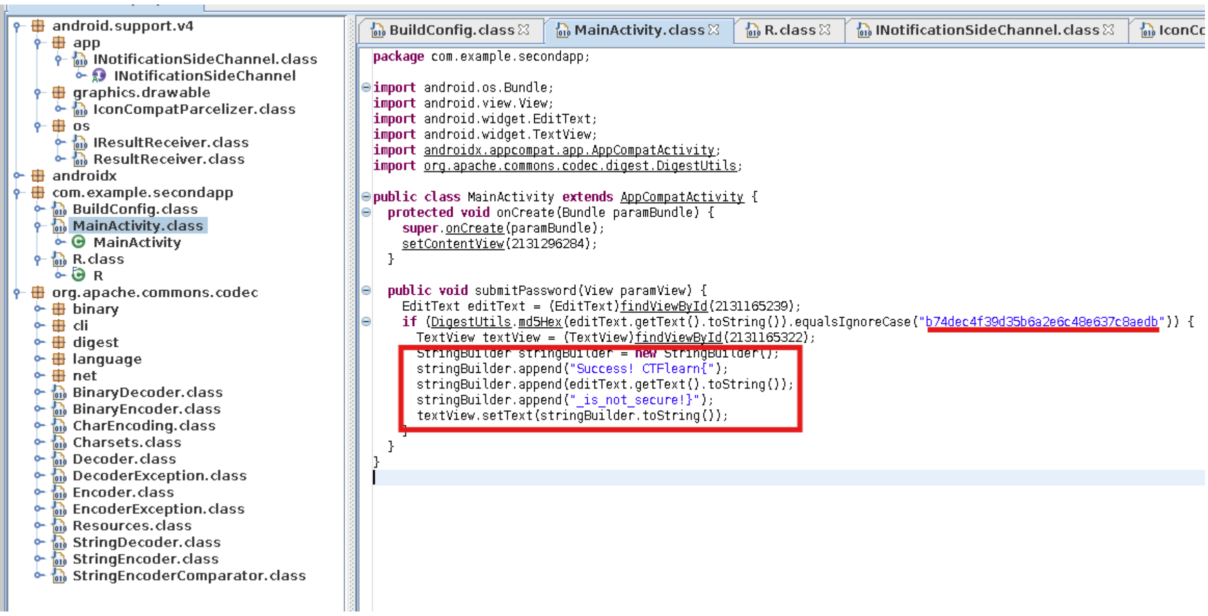
1. **dex2jar,** to convert **classes.dex** into a **Jar** file :

   ```
   d2j-dex2jar classes.dex
   ```

2. **jd-gui**, a Jar GUi viewer :

   ```
   jd-gui classes-dex2jar.jar
   ```

# Here, in the **com.example.secondapp -> MainActivity.class** file we can see an MD5. And we can observe that the flag format is **CTFlearn{(MD5)_is_not_secure!} :**



```java
package com.example.secondapp;

import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;
import org.apache.commons.codec.digest.DigestUtils;

public class MainActivity extends AppCompatActivity {
  protected void onCreate(Bundle paramBundle) {
    super.onCreate(paramBundle);
    setContentView(2131296284);
  }

  public void submitPassword(View paramView) {
    EditText editText = (EditText)findViewById(2131165239);
    if (DigestUtils.md5Hex(editText.getText().toString()).equalsIgnoreCase("b74dec4f39d35b6a2e6c48e637c8aedb")) {
      TextView textView = (TextView)findViewById(2131165322);
      StringBuilder stringBuilder = new StringBuilder();
      stringBuilder.append("Success! CTFlearn{");
      stringBuilder.append(editText.getText().toString());
      stringBuilder.append("_is_not_secure!}");
      textView.setText(stringBuilder.toString());
    }
  }
}
```

# If we upload the MD5 on https://www.dcode.fr/md5-hash, we can see the string is `Spring2019`

THE FLAG : CTFlearn{Spring2019_is_not_secure!}
~Z4que