

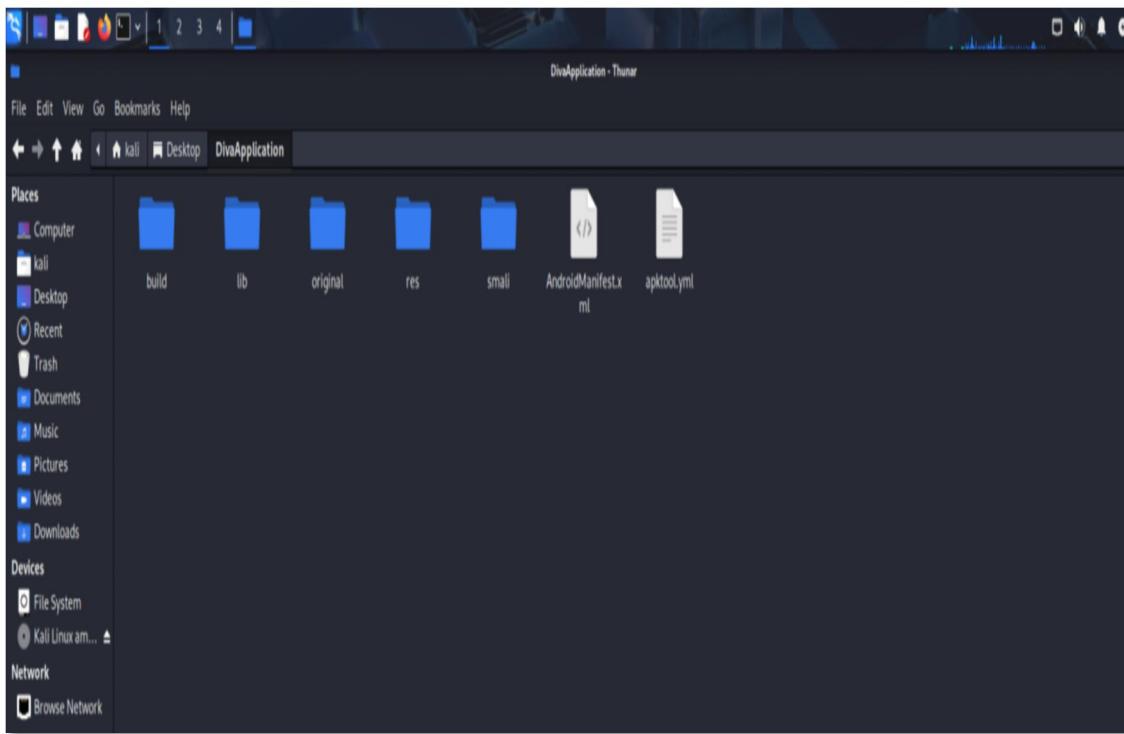
## LAB - 9

### Aim :- Decompiling apk by using apktoolkit.

**Decompiling an APK using APKToolkit** is the process of extracting and converting an Android application's APK file back into a more human-readable format using the APKToolkit (a utility or collection of tools like apktool, dex2jar, jd-gui, etc.). This process helps understand the app's structure, resources, and behavior — often used in reverse engineering, app debugging, or security testing.

```
(kali㉿kali)-[~/Desktop]
└─$ apktool d DivaApplication.apk
I: Using Apktool 2.7.0-dirty on DivaApplication.apk
I: Loading resource table ...
I: Decoding AndroidManifest.xml with resources ...
I: Loading resource table from file: /home/kali/.local/share/apktool/framework/1.apk
I: Regular manifest package ...
I: Decoding file-resources ...
I: Decoding values */* XMLs ...
I: Baksmaling classes.dex ...
I: Copying assets and libs ...
I: Copying unknown files ...
I: Copying original files ...
```

```
(kali㉿kali)-[~/Desktop]
└─$ apktool d DivaApplication.apk
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I: Copying assets and libs ...
I: Copying unknown files ...
I: Copying original files ...
```



This XML file does not appear to have any style information associated with it. The document tree is shown below.

```

<manifest package="jakhar.aseem.diva" platformBuildVersionCode="23" platformBuildVersionName="6.0-2166767">
<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE"/>
<uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE"/>
<uses-permission android:name="android.permission.INTERNET"/>
<application android:allowBackup="true" android:debuggable="true" android:icon="@mipmap/ic_launcher" android:supportsRtl="true" android:theme="@style/AppTheme">
<activity android:label="@string/app_name" android:name="jakhar.aseem.diva.MainActivity" android:theme="@style/AppTheme.NoActionBar">
<intent-filter>
<action android:name="android.intent.action.MAIN"/>
<category android:name="android.intent.category.LAUNCHER"/>
</intent-filter>
<activity android:label="@string/d1" android:name="jakhar.aseem.diva.LogActivity"/>
<activity android:label="@string/d2" android:name="jakhar.aseem.diva.HardcodeActivity"/>
<activity android:label="@string/d3" android:name="jakhar.aseem.diva.InsecureDataStorage1Activity"/>
<activity android:label="@string/d4" android:name="jakhar.aseem.diva.InsecureDataStorage2Activity"/>
<activity android:label="@string/d5" android:name="jakhar.aseem.diva.InsecureDataStorage3Activity"/>
<activity android:label="@string/d6" android:name="jakhar.aseem.diva.InsecureDataStorage4Activity"/>
<activity android:label="@string/d7" android:name="jakhar.aseem.diva.SQLInjectionActivity"/>
<activity android:label="@string/d8" android:name="jakhar.aseem.diva.InputValidationURISchemeActivity"/>
<activity android:label="@string/d9" android:name="jakhar.aseem.diva.AccessControlActivity"/>
<activity android:label="@string/apic_label" android:name="jakhar.aseem.diva.APIcredsActivity">
<intent-filter>
<action android:name="jakhar.aseem.diva.action.VIEW_CREDS"/>
<category android:name="android.intent.category.DEFAULT"/>
</intent-filter>
<activity android:label="@string/d10" android:name="jakhar.aseem.diva.AccessControl2Activity"/>
<activity android:label="@string/apic2_label" android:name="jakhar.aseem.diva.APIcreds2Activity">
<intent-filter>
<action android:name="jakhar.aseem.diva.action.VIEW_CREDS2"/>
<category android:name="android.intent.category.DEFAULT"/>
</intent-filter>
<activity android:authorities="jakhar.aseem.diva.provider.notesprovider" android:enabled="true" android:exported="true" android:name="jakhar.aseem.diva.NotesProvider"/>
<activity android:label="@string/d11" android:name="jakhar.aseem.diva.AccessControl3Activity"/>

```

**Conclusion :-**

Decompiling an APK using APKToolKit helps developers and security researchers understand app structure and behavior without original source code. It involves decoding the APK to extract resources and smali code, and optionally converting to Java for better readability. While powerful, this method should always be used responsibly and ethically — with permission or for educational purposes.