PRACTICAL1


```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.andro
    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"

    android:background="#9C27B0"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="#FFFFFF"
        android:fontFamily="sans-serif-medium"
        android:padding="20dp"
        android:text="HELLO WORLD 7 😊"
        android:textColor="@color/main"
        android:textSize="30sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.001" />

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

```kotlin
package com.example.pract1

import ...

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
    }
}
```
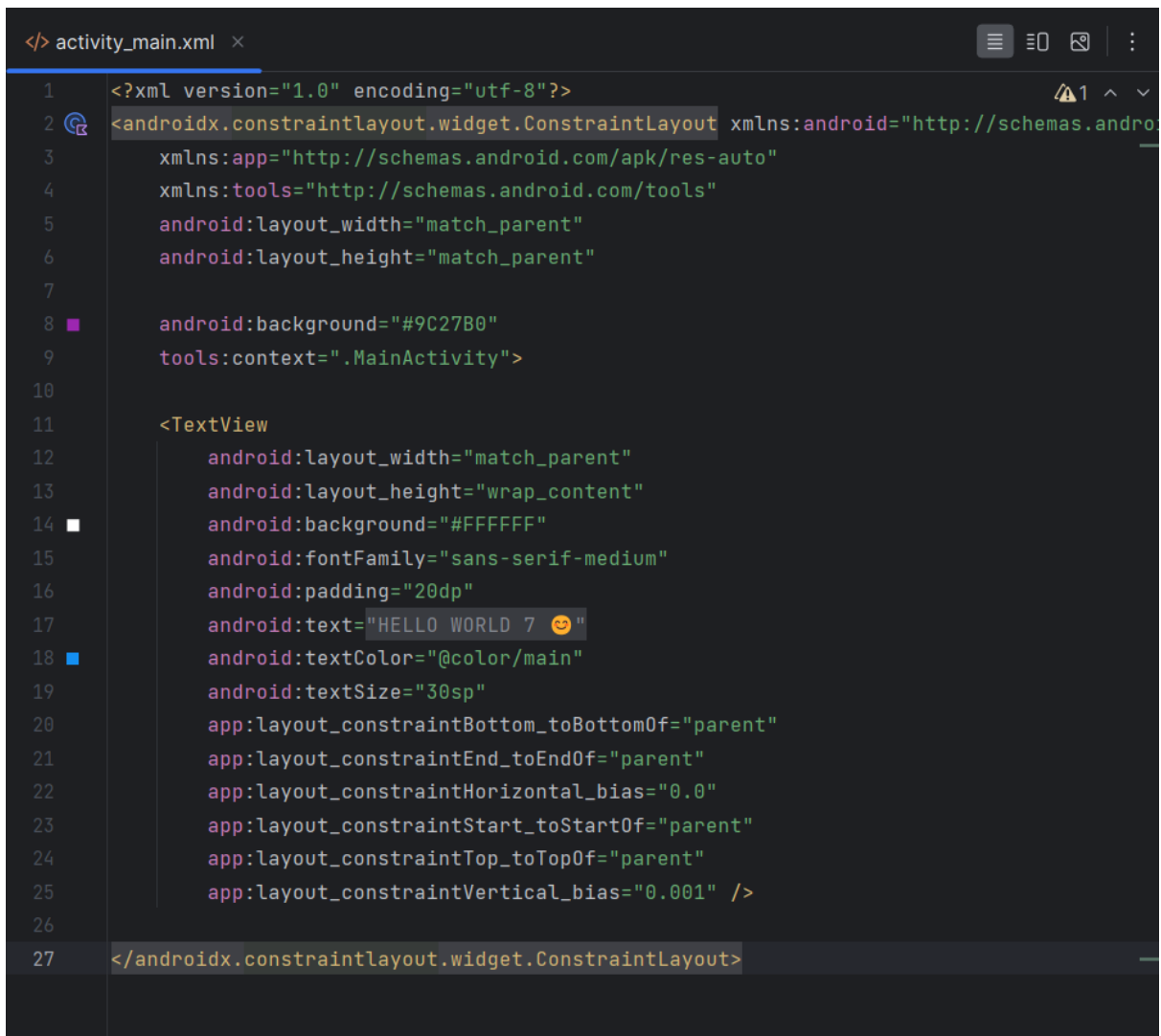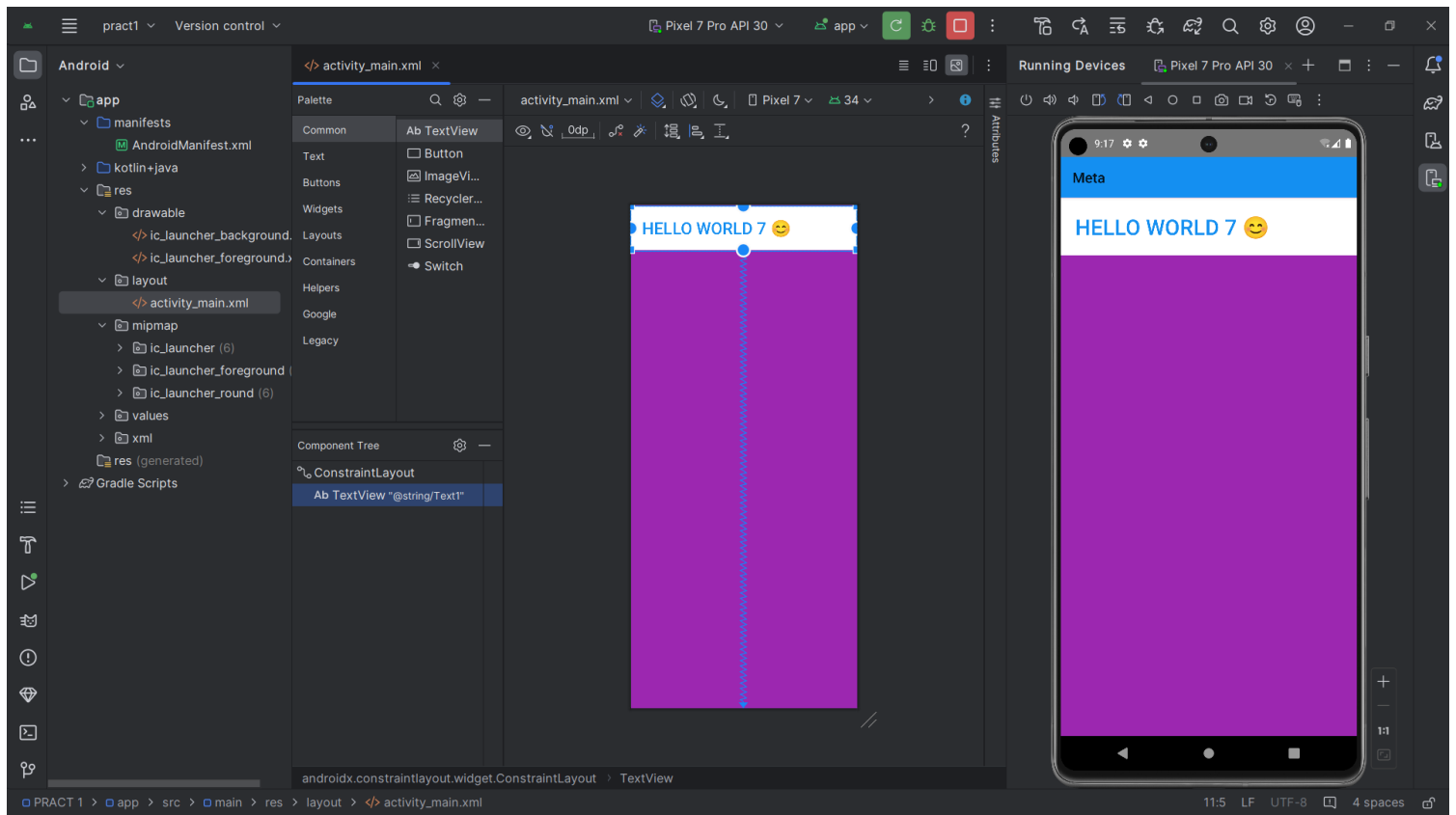
Analyzing...

Android

- app
  - manifests
  - kotlin+java
  - res
    - drawable
    - layout
    - mipmap
    - values
    - xml
  - res (generated)
- Gradle Scripts

values
- colors.xml
- strings.xml
- themes (2)
  - themes.xml
  - themes.xml (night)
- xml
  - backup_rules.xml
  - data_extraction_rules.xm
- res (generated)

strings.xml

```xml
<resources>

    <string name="app_name">FACEBOOK</string>
    <string name="Text1">HELLO WORLD 7 😊</string>

</resources>
```

colors.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="black">#FF000000</color>
    <color name="white">#FFFFFFFF</color>
    <color name="main">#148FF1</color>
</resources>
```
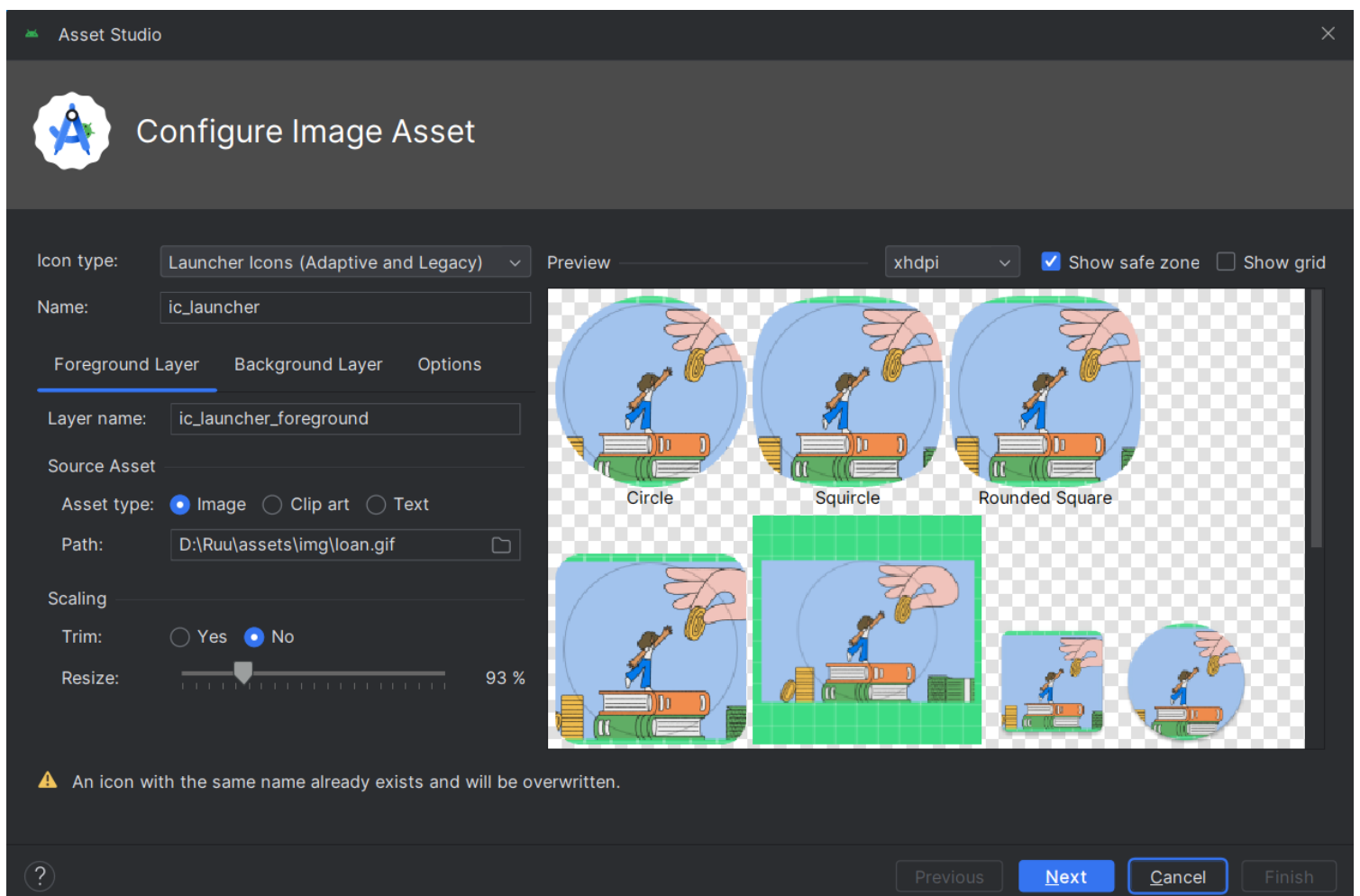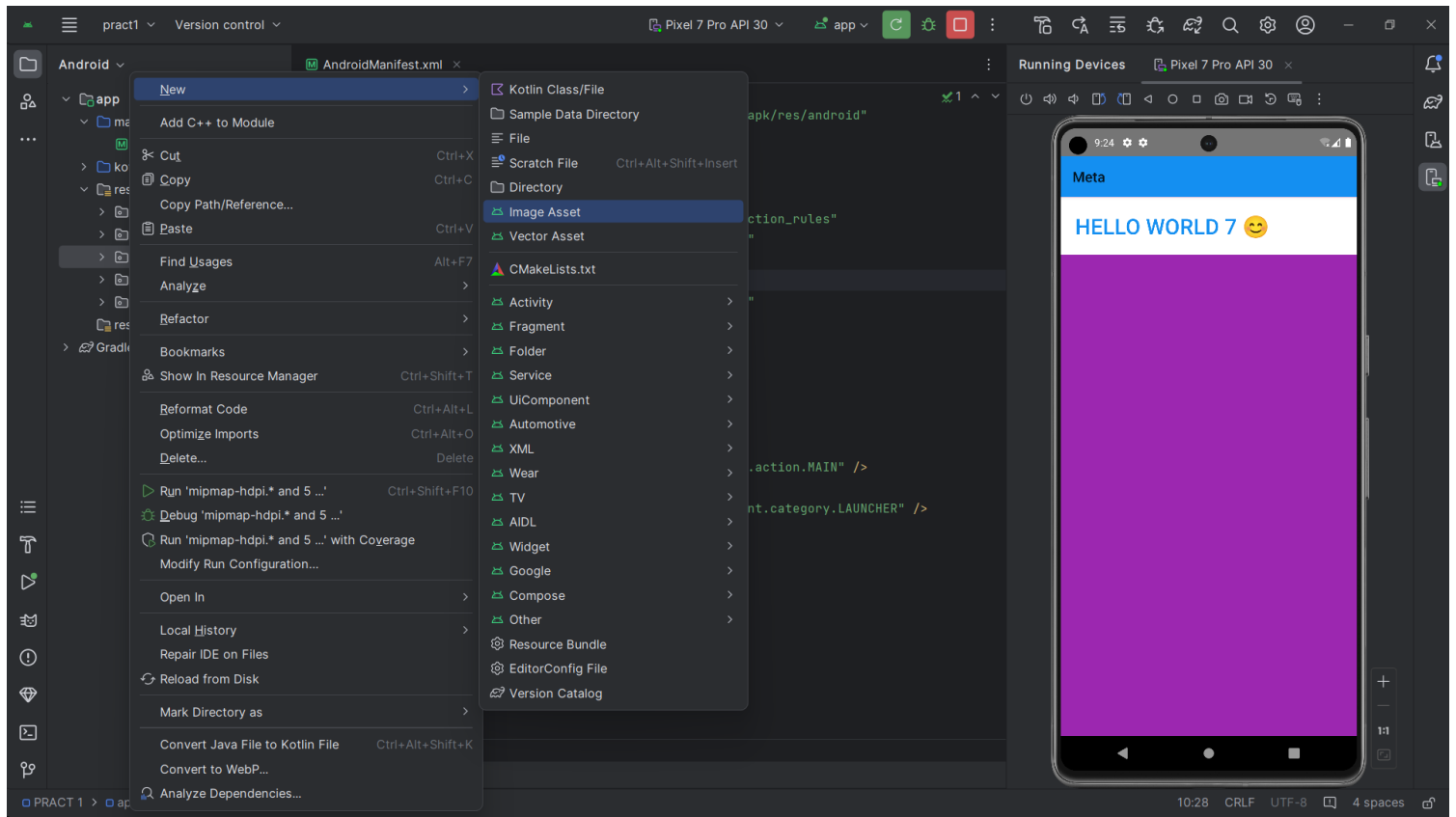
```xml
themes.xml  ×

1   <resources xmlns:tools="http://schemas.android.com/tools">
2       <!-- Base application theme. -->
3   <!--    <style name="Base.Theme.Pract1" parent="Theme.Material3.DayNight.NoActionBar">-->
4       <style name="Base.Theme.Pract1"  parent="Theme.AppCompat.DayNight">
5   <item name="colorPrimary">@color/main</item>
6           <!-- Customize your light theme here. -->
7   <!--        <item name="colorPrimary">@color/my_light_primary</item> -->
8       </style>
9
10      <style name="Theme.Pract1"  parent="Base.Theme.Pract1" />
11  </resources>
```
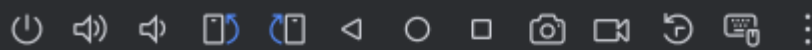
```xml
AndroidManifest.xml  ×

1   <?xml version="1.0" encoding="utf-8"?>
2   <manifest xmlns:android="http://schemas.android.com/apk/res/android"
3       xmlns:tools="http://schemas.android.com/tools">
4
5       <application
6           android:allowBackup="true"
7           android:dataExtractionRules="@xml/data_extraction_rules"
8           android:fullBackupContent="@xml/backup_rules"
9           android:icon="@mipmap/ic_launcher"
10          android:label="Meta"
11          android:roundIcon="@mipmap/ic_launcher_round"
12          android:supportsRtl="true"
13          android:theme="@style/Theme.Pract1"
14          tools:targetApi="31">
15          <activity
16              android:name=".MainActivity"
17              android:exported="true">
18              <intent-filter>
19                  <action android:name="android.intent.action.MAIN" />
20
21                  <category android:name="android.intent.category.LAUNCHER" />
22              </intent-filter>
23          </activity>
24      </application>
25
26  </manifest>
```

Top window (Android Studio):

pract1 | Version control | Pixel 7 Pro API 30 | app

Android | AndroidManifest.xml

- New
- Add C++ to Module
- Cut — Ctrl+X
- Copy — Ctrl+C
- Copy Path/Reference...
- Paste — Ctrl+V
- Find Usages — Alt+F7
- Analyze
- Refactor
- Bookmarks
- Show In Resource Manager — Ctrl+Shift+T
- Reformat Code — Ctrl+Alt+L
- Optimize Imports — Ctrl+Alt+O
- Delete... — Delete
- Run 'mipmap-hdpi.* and 5 ...' — Ctrl+Shift+F10
- Debug 'mipmap-hdpi.* and 5 ...'
- Run 'mipmap-hdpi.* and 5 ...' with Coverage
- Modify Run Configuration...
- Open In
- Local History
- Repair IDE on Files
- Reload from Disk
- Mark Directory as
- Convert Java File to Kotlin File — Ctrl+Alt+Shift+K
- Convert to WebP...
- Analyze Dependencies...

New submenu:
- Kotlin Class/File
- Sample Data Directory
- File
- Scratch File — Ctrl+Alt+Shift+Insert
- Directory
- Image Asset
- Vector Asset
- CMakeLists.txt
- Activity
- Fragment
- Folder
- Service
- UiComponent
- Automotive
- XML
- Wear
- TV
- AIDL
- Widget
- Google
- Compose
- Other
- Resource Bundle
- EditorConfig File
- Version Catalog

Running Devices | Pixel 7 Pro API 30

Device screen:
9:24
Meta
HELLO WORLD 7 😊

10:28 CRLF UTF-8 4 spaces

Bottom window (Asset Studio):

Asset Studio

Configure Image Asset

Icon type: Launcher Icons (Adaptive and Legacy)

Name: ic_launcher

Foreground Layer | Background Layer | Options

Layer name: ic_launcher_foreground

Source Asset

Asset type: ● Image ○ Clip art ○ Text

Path: D:\Ruu\assets\img\loan.gif

Scaling

Trim: ○ Yes ● No

Resize: —————————————— 93 %

Preview | xhdpi | ☑ Show safe zone ☐ Show grid

Circle   Squircle   Rounded Square

⚠ An icon with the same name already exists and will be overwritten.

Previous | Next | Cancel | Finish

9:23

Meta

HELLO WORLD 7 😊