LATIHAN LAYOUT LANJUTAN

Latihan 1. Table Layout

a. Tulis ulang kode berikut dan screenshoot tampilannya!
   Note: Kode program harus di running pada device

```xml
<?xml version="1.0" encoding="utf-8"?>
<TableLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent" android:stretchColumns="1">

    <TableRow
        android:background="#22ff">
        <TextView
            android:layout_column="1"
            android:text="Open..."
            android:padding="3dip" />
        <TextView android:text="Ctrl-
            O" android:gravity="right"
            android:padding="3dip" />
    </TableRow>

    <TableRow android:background="#22ff">
        <TextView
            android:layout_column="1"
            android:text="Save..."
            android:padding="3dip" />
        <TextView android:text="Ctrl-
            S" android:gravity="right"
            android:padding="3dip" />
    </TableRow>

    <TableRow android:background="#22ff">
        <TextView
            android:layout_column="1"
            android:text="Save As..."
            android:padding="3dip" />
        <TextView android:text="Ctrl-
            Shift-S"
            android:gravity="right"
            android:padding="3dip" />
    </TableRow>

    <View android:layout_height="2dip"
        android:background="#FF909090" />
        <TableRow
        android:background="#ffff00">
        <TextView android:text="X"
            android:padding="3dip" />
        <TextView
            android:text="Import..."
            android:padding="3dip" />
    </TableRow>

    <TableRow android:background="#ffff00">
        <TextView android:text="X"
            android:padding="3dip" />
```

```
        <TextView
            android:text="Export..."
            android:padding="3dip" />
        <TextView android:text="Ctrl-
            E" android:gravity="right"
            android:padding="3dip" />
    </TableRow>

    <View android:layout_height="2dip"
        android:background="#FF909090" />

    <TableRow android:background="#aaf">
        <TextView
            android:layout_column="1"
            android:text="Quit"
            android:padding="3dip" />
    </TableRow>
</TableLayout>
```

Latihan 2. Frame Layout

a. Tulis ulang kode berikut dan screenshoot tampilannya!

```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <View
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="@android:color/holo_blue_light"/>

    <ImageView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:src="@mipmap/ic_launcher" />
    <View
        android:layout_width="50dp"
        android:layout_height="match_parent"
        android:background="@android:color/holo_orange_light"/>
    <View
        android:layout_width="50dp"
        android:layout_height="match_parent"
        android:layout_gravity="right"
        android:background="@android:color/holo_orange_light"/>
</FrameLayout>
```

Ket: *android color* harus di daftarkan terlebih dahulu di file color.xml

Latihan 3. Frame Layout

a. Jika ingin membuat tampilan yang bertumpuk bisa menggunakan frame layout. Tulis ulang kode berikut dan screenshoot tampilannya!

```xml
<?xml version="1.0" encoding="utf-8"?>

<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:id="@+id/mainlayout"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:orientation="vertical" >

    <!--Red square -->
    <View
        android:layout_width="250dp"
        android:layout_height="250dp"
        android:background="#FFFF0000" />

    <!--White square -->
    <View
        android:layout_width="150dp"
        android:layout_height="150dp"
        android:background="#FFFFFFFF" />

</FrameLayout>
```

Latihan 4: Grid Layout

a. Tulis ulang kode berikut dan screenshoot tampilannya!

```xml
<GridLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/GridLayout1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:columnCount="2"
    android:rowCount="2"
    android:orientation="horizontal"
    tools:context=".GridLayoutActivity">

    <Button
        android:id="@+id/button1"
        android:layout_gravity="left|top"
        android:text="Button" />

    <Button
        android:id="@+id/button2"
        android:layout_gravity="left|top"
        android:text="Button" />

    <Button
        android:id="@+id/button3"
        android:layout_gravity="left|top"
        android:text="Button" />

    <Button
        android:id="@+id/button4"
        android:layout_gravity="left|top"
        android:text="Button" />

</GridLayout>
```
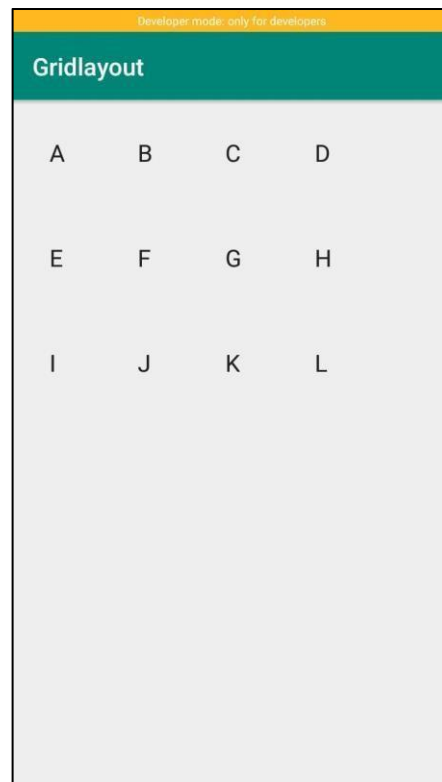
Tampilan kode program latihan 4 diatas:

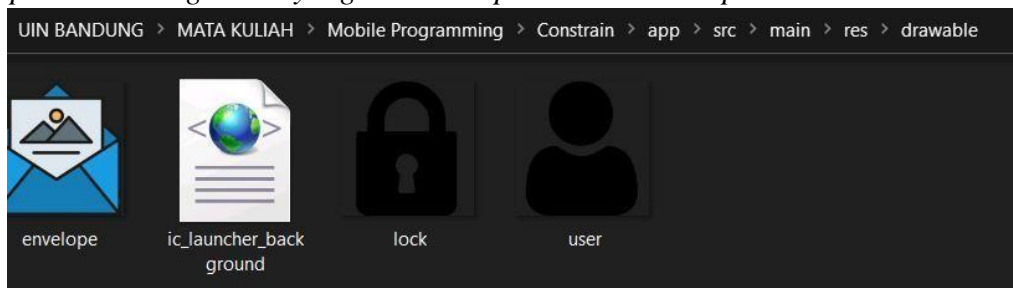**Latihan 5 Latihan membuat tampilan grid:**

a. Buatlah kode program XML untuk tampilan button menggunakan grid seperti di bawah ini!

Latihan 6. Constraint Layout:

1. Tulis ulang kode program berikut dan *screenshoot* tampilannya ketika dijalankan di device android.

Ket: simpan resource gambar yang diberikan pada drawable seperti di bawah ini:

2. Pahami kode dan konsep constraint dari kode program berikut!

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
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="@drawable/ic_launcher_background">

    <FrameLayout android:id="@+id/imageView2"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_marginTop="52dp"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent
" app:layout_constraintTop_toTopOf="parent"
        >
```

```xml
        <ImageView
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:src="@drawable/envelope" />
        <View android:layout_width="10dp"
            android:layout_height="match_parent"
            android:background="@android:color/holo_orange_light"/>
        <View android:layout_width="10dp"
            android:layout_height="match_parent"
            android:layout_gravity="right"
            android:background="@android:color/holo_orange_light"/>
</FrameLayout>

<LinearLayout android:id="@+id/linearLayout"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="80dp"
    android:background="#ffffff"
    android:orientation="horizontal"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/imageView2"
    >

    <ImageView
        android:layout_width="30dp"
        android:layout_height="30dp"
        android:layout_gravity="center"
        android:layout_margin="10dp"
        android:background="#ffffff"
        android:src="@drawable/user"/>

    <EditText android:id="@+id/username"
        android:layout_width="298dp"
        android:layout_height="48dp"
        android:background="#ffffff"
        android:ems="10" android:hint="Email"
        android:inputType="textPersonName"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="paren
        t" tools:layout_editor_absoluteY="231dp"
        />
</LinearLayout>

<LinearLayout android:id="@+id/linearLayout2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:background="#ffffff"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/linearLayout"
    >

    <ImageView
        android:layout_width="30dp"
        android:layout_height="30dp"
        android:layout_gravity="center"
        android:layout_margin="10dp"
        android:src="@drawable/lock" />
```

```xml
        <EditText android:id="@+id/password"
            android:layout_width="298dp"
            android:layout_height="48dp"
            android:background="#ffffff" android:ems="10"
            android:hint="Password"
            android:inputType="textPassword"
            app:layout_constraintHorizontal_bias="0.523"
            app:layout_constraintLeft_toLeftOf="parent"
            app:layout_constraintRight_toRightOf="parent"
            tools:layout_editor_absoluteY="279dp" />

    </LinearLayout>

    <Button
        android:id="@+id/tombol_login"
        android:layout_width="347dp"
        android:layout_height="44dp"
        android:layout_marginLeft="8dp"
        android:layout_marginRight="8dp"
        android:layout_marginTop="16dp"
        android:background="#ff6f00"
        android:text="Login"
        android:textColor="#ffffff"
        android:textSize="20sp"
        app:layout_constraintHorizontal_bias="0.523"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/linearLayout2" />

    <Button
        android:id="@+id/tombol_guest"
        android:layout_width="347dp"
        android:layout_height="46dp"
        android:layout_marginTop="10dp"
        android:background="#2196f3"
        android:text="guest"
        android:textColor="#ffffff"
        android:textSize="20sp"
        app:layout_constraintHorizontal_bias="0.502"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/tombol_login" />

    <Button
        android:id="@+id/tombol_lupa_password"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="8dp"
        android:layout_marginRight="8dp"
        android:background="#00000000"
        android:text="Forgot your password?"
        android:textAllCaps="false"
        android:textColor="#ffffff"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/tombol_login"
        app:layout_constraintVertical_bias="0.319" />
```

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

Berkas yang dikumpulkan:
1. File Word yang berisi **nama_nim**.docx yang di dalamnya memuat:
   a. Hasil screeshoot di setiap latihan
   b. Link github/gitlab kode program latihan 1-6