

Lab Program: 4 Wallpaper

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XML Code:

```
<?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"
tools:context=".MainActivity">

    <TextView
        android:id="@+id/text1"
        android:layout_width="219dp"
        android:layout_height="39dp"
        android:text="@string/wallpaper_changer"
        android:textSize="25sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.069" />

    <Button
        android:id="@+id/button"
        android:layout_width="266dp"
```

```
        android:layout_height="58dp"
        android:text="@string/click_to_change_wallpaper"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.222" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Java Code:

```
package com.example.picchange;

import androidx.appcompat.app.AppCompatActivity;
import androidx.core.content.res.ResourcesCompat;

import android.app.WallpaperManager;
import android.graphics.Bitmap;
import android.graphics.drawable.BitmapDrawable;
import android.graphics.drawable.Drawable;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

import java.io.IOException;
import java.util.Timer;
import java.util.TimerTask;

public class MainActivity extends AppCompatActivity {
```

```

    Button wall;

    Timer tim;

    Drawable drawable;

    WallpaperManager wlp;

    int prev=1;

    @Override

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

        tim = new Timer();

        wlp = WallpaperManager.getInstance(this);

        wall = findViewById(R.id.button);

        wall.setOnClickListener(new
View.OnClickListener() {

            @Override public void onClick(View view) {
                setWallpaper();
            }

        });

    }

    private void setWallpaper() {
        tim.schedule(new TimerTask() {

            @Override

            public void run() {

                if(prev==1) {

                    drawable =
ResourcesCompat.getDrawable(getResources(),
R.drawable.one, null);

                    prev = 2;

                }

```

```
        else if (prev==2) {
            drawable =
ResourcesCompat.getDrawable(getResources(),
R.drawable.two, null);
            prev=3;
        }
        else if (prev==3) {
            drawable =
ResourcesCompat.getDrawable(getResources(),
R.drawable.three, null);
            prev=4;
        }
        else if (prev==4) {
            drawable =
ResourcesCompat.getDrawable(getResources(),
R.drawable.four, null);
            prev=5;
        }
        else if (prev==5) {
            drawable =
ResourcesCompat.getDrawable(getResources(),
R.drawable.five, null);
            prev=1;
        }

        Bitmap wallpaper =
((BitmapDrawable)drawable).getBitmap();
        try {
            wlp.setBitmap(wallpaper);
        }
        catch (IOException e)
```

```
        {  
            e.printStackTrace();  
        }  
    }  
}, 0, 300); } }
```

PicChange

Wallpaper changer

CLICK TO CHANGE
WALLPAPER