



```
.....  
package com.example.lab04play;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```
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 java.io.IOException;
```

```
import java.util.Timer;
```

```
import java.util.TimerTask;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    Timer myTimer;
```

```
    Drawable drawable;
```

```
    WallpaperManager wpman;
```

```
    int nextImg = 1;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
```

```
    super.onCreate(savedInstanceState);
```

```
    setContentView(R.layout.activity_main);
```

```
    myTimer = new Timer(); //1. Initialize myTimer object
```

```
    wpman=WallpaperManager.getInstance(this); //2. Create an instance
```

*of the Wallpaper manager*

```
}
```

```
public void changeWallPaper(View view) {  
    setWallpaper();  
}
```

```
private void setWallpaper() {  
    myTimer.schedule(new TimerTask() {  
        @Override  
        public void run() {  
            if(nextImg == 1)  
            {  
                drawable=getResources().getDrawable(R.drawable.img1);  
                nextImg = 2;  
            }  
            else if (nextImg==2)  
            {  
                drawable=getResources().getDrawable(R.drawable.img2);  
                nextImg = 3;  
            }  
            else if (nextImg==3)  
            {  
                drawable=getResources().getDrawable(R.drawable.img3);  
                nextImg = 4;  
            }  
            else if (nextImg==4)  
            {  
                drawable=getResources().getDrawable(R.drawable.img4);
```

```

        nextImg = 5;
    }
    else if (nextImg==5)
    {
        drawable=getResources().getDrawable(R.drawable.img5);
        nextImg = 6;
    }
    else if (nextImg==6)
    {
        drawable=getResources().getDrawable(R.drawable.img6);
        nextImg = 7;
    }
    else if (nextImg==7)
    {
        drawable=getResources().getDrawable(R.drawable.img7);
        nextImg = 1;
    }

```

*//Create a BitMap Image..Why?*

```

    Bitmap img = ((BitmapDrawable)
drawable).getBitmap();//Cast the drawable into a BitMapDrawable object and
assign it to img"Bitmap variable"

```

*//Now set those images, YES you have to take permissions from the android manifest*

```

try {
    wpman.setImageBitmap(img);
} catch (IOException e) {
    e.printStackTrace();
}

```

```
        }  
    }  
    }, 30000, 5000);  
}  
}
```

```
.....  
  
package com.example.wallp;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```
import android.app.WallpaperManager;
```

```
import android.graphics.BitmapFactory;
```

```
import android.os.Bundle;
```

```
import android.view.View;
```

```
import android.widget.Button;
```

```
import java.io.IOException;
```

```
import java.util.Random;
```

```
import java.util.Timer;
```

```
import java.util.TimerTask;
```

```
public class MainActivity extends AppCompatActivity implements  
View.OnClickListener {  
    Button btn;
```

```

    boolean running;

    //To load all seven images at the same time, create an array of type
    in
    //Iterate through them, OBSERVE: The images will be populated &
    displayed on the left Side
    int[] imgC = new int[]{R.drawable.img1, R.drawable.img2,
R.drawable.img3, R.drawable.img4, R.drawable.img5, R.drawable.img6,
R.drawable.img7};

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

        btn = (Button) findViewById(R.id.button);
        btn.setOnClickListener(this);
    }
    //NOTE: CTRL+Q = Quick Documentation Lookup, CTRL+P = Parameters for
    Selected Method
    @Override
    public void onClick(View view) {
        if(!running){ // Refer Video for the timer explanation
            new Timer().schedule(new myTimer(), 0, 3000); //create an
            object of Timer()
            running = true;
        }
    }
}

```

```

private class myTimer extends TimerTask {
    @Override
    public void run() {
        try{ //Try to Handle the Exception by using the
WallPaperManager class
            WallpaperManager wallpaperManager =
WallpaperManager.getInstance(getBaseContext());
            Random random = new Random();//Creates an Object of
Random Class

//OBSERVATION: This was changing randomly. That's
incorrect, so, we need a better approach

            wallpaperManager.setBitmap(BitmapFactory.decodeResource(getResources(),img
C[random.nextInt(7)]));

//It will turn Red, make sure you enable Permission

        } catch (IOException e) {
            e.printStackTrace();
        }
    }
    //It will show RED Underline, you have to RightClick->Show Context
Action->Implement Run Methods
    //and the error will be gone
}
}

```