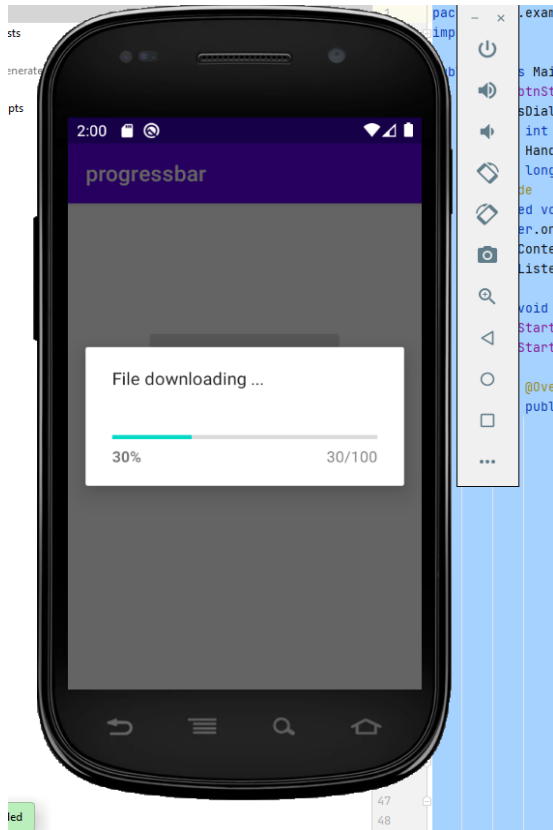


## progress Bar



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingLeft="10dp"
    android:paddingRight="10dp">
    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="116dp"
        android:text="Movie Download file" />

</RelativeLayout>
```

```
package com.example.progressbar;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.app.ProgressDialog;
import android.os.Handler;

import android.view.View;
import android.widget.Button;
```

```

public class MainActivity extends AppCompatActivity {
    Button btnStartProgress;
    ProgressDialog progressBar;
    private int progressBarStatus = 0;
    private Handler progressBarHandler = new Handler();
    private long fileSize = 0;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        addListenerOnButtonClick();
    }
    public void addListenerOnButtonClick() {
        btnStartProgress = findViewById(R.id.button1);
        btnStartProgress.setOnClickListener(new View.OnClickListener() {

            @Override
            public void onClick(View v) {
                // creating progress bar dialog
                progressBar = new ProgressDialog(v.getContext());
                progressBar.setCancelable(true);
                progressBar.setMessage("File downloading ...");

                progressBar.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
                progressBar.setProgress(0);
                progressBar.setMax(100);
                progressBar.show();
                //reset progress bar and filesize status
                progressBarStatus = 0;
                fileSize = 0;

                new Thread(new Runnable() {
                    public void run() {
                        while (progressBarStatus < 100) {
                            // performing operation
                            progressBarStatus = doOperation();
                            try {
                                Thread.sleep(1000);
                            } catch (InterruptedException e) {
                                e.printStackTrace();
                            }
                            // Updating the progress bar
                            progressBarHandler.post(new Runnable() {
                                public void run() {

                                    progressBar.setProgress(progressBarStatus);
                                }
                            });
                        }
                        // performing operation if file is downloaded,
                        if (progressBarStatus >= 100) {
                            // sleeping for 1 second after operation
                            completed

                            try {
                                Thread.sleep(1000);
                            } catch (InterruptedException e) {
                                e.printStackTrace();
                            }
                            // close the progress bar dialog
                            progressBar.dismiss();
                        }
                    }
                });
            }
        });
    }
}

```

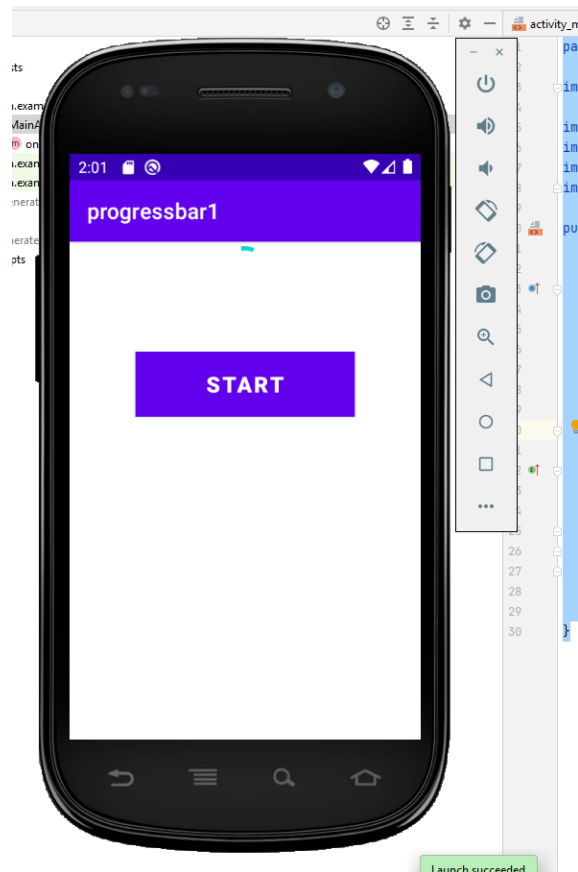
```

        }
    }
    }).start();
} //end of onClick method
});

}
// checking how much file is downloaded and updating the filesize
public int doOperation() {
    //The range of ProgressDialog starts from 0 to 10000
    while (fileSize <= 10000) {
        fileSize++;
        if (fileSize == 1000) {
            return 10;
        } else if (fileSize == 2000) {
            return 20;
        } else if (fileSize == 3000) {
            return 30;
        } else if (fileSize == 4000) {
            return 40; // you can add more else if
        }
        /* else {
            return 100;
        } */
    } //end of while
    return 100;
} //end of doOperation
}

```

## example 2



```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <ProgressBar
        android:id="@+id/simpleProgressBar"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:visibility="invisible"
        android:layout_centerHorizontal="true"/>

    <Button
        android:id="@+id/startButton"
        android:layout_width="200dp"
        android:layout_height="wrap_content"
        android:text="Start"
        android:textSize="20sp"
        android:textStyle="bold"
```

```

        android:layout_centerHorizontal="true"
        android:layout_marginTop="100dp"
        android:padding="10dp"
        android:background="#0f0"
        android:textColor="#fff"/>

</RelativeLayout>
package com.example.progressbar1;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ProgressBar;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        // initiate progress bar and start button
        final ProgressBar simpleProgressBar = (ProgressBar)
findViewById(R.id.simpleProgressBar);
        Button startButton = (Button) findViewById(R.id.startButton);
        // perform click event on button
        startButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                // visible the progress bar
                simpleProgressBar.setVisibility(View.VISIBLE);
            }
        });
    }

}

```