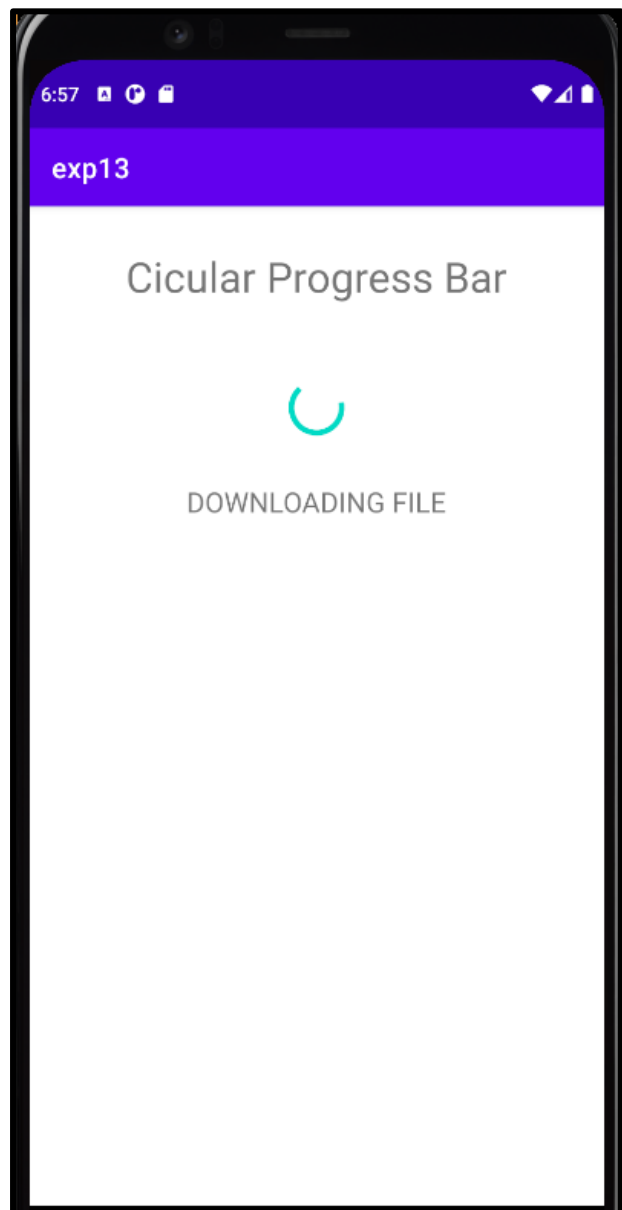# Practical 13

1. Write a Program to display circular progress bar

Xml Code :

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:orientation="vertical" >
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Cicular Progress Bar"
        android:textSize="30sp"
        android:layout_gravity="center"
        android:layout_marginTop="30dp"
        />
    <ProgressBar
        android:indeterminate="false"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_marginTop="50dp"
        />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textSize="20sp"
        android:text="DOWNLOADING FILE"
        android:layout_gravity="center"
        android:layout_marginTop="30dp"
        />
</LinearLayout>
```

Output:

2. Write a Program to display the following output.

Xml Code :

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/btn"
        android:layout_marginTop="100dp"
        android:backgroundTint="@color/black"
        android:layout_gravity="center"
        android:text="Download File"
        android:textSize="30dp"
        android:padding="10dp"
        />
</LinearLayout>
```

Java Code :

```java
package com.example.exp13;
import androidx.appcompat.app.AppCompatActivity;
import android.app.ProgressDialog;
import android.os.Bundle;
import android.os.Handler;
import android.view.View;
import android.widget.Button;
public class MainActivity2 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_main2);
        addProgressBarOnButtonClick();
    }
    public void addProgressBarOnButtonClick() {
        btnStartProgress = findViewById(R.id.btn);
        btnStartProgress.setOnClickListener(new View.OnClickListener(){
            @Override
            public void onClick(View v) {
                progressBar = new ProgressDialog(v.getContext());
                progressBar.setCancelable(true);
                progressBar.setMessage("File Downloading ...");
                progressBar.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
                progressBar.setProgress(0);
```

```java
          progressBar.setMax(100);
          progressBar.show();
          progressBarStatus = 0;
          fileSize = 0;
          new Thread(new Runnable() {
            public void run() {
              while (progressBarStatus < 100) {
                progressBarStatus = doOperation();
                try
                {
                  Thread.sleep(1000);
                } catch (InterruptedException e)
                {
                  e.printStackTrace();
                }
                progressBarHandler.post(new Runnable() {
                  public void run() {
                    progressBar.setProgress(progressBarStatus);
                  }
                });
              }
              if (progressBarStatus >= 100) {
                try {
                  Thread.sleep(1000);
                } catch (InterruptedException e) {
                  e.printStackTrace();
                }
                progressBar.dismiss();
              }
            }
          }).start();
        }
    });
  }
  public int doOperation() {
    while (fileSize <= 100000) {
      fileSize++;
      if (fileSize == 10000) {
        return 10;
      }
      else if (fileSize == 20000) {
        return 20;
      }
      else if (fileSize == 30000) {
        return 30;
      }
      else if (fileSize == 40000) {
        return 40;
      }
      else if (fileSize == 50000) {
        return 50;
      }
      else if (fileSize == 60000) {
        return 60;
      }
```

```
        else if (fileSize == 70000) {
            return 70;
        }
    }
    return 100;
  }
}
```

Output: