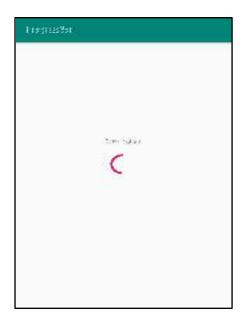
# Q1. Write a program to display circular progress bar

## 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:layout width="wrap content"
            android:layout height="wrap content"
            android:text="Downloading..."
            app:layout constraintBottom toBottomOf="parent"
            app:layout constraintLeft toLeftOf="parent"
            app:layout_constraintRight_toRightOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout constraintVertical bias="0.367"/>
      <ProgressBar
            android:id="@+id/progressBar"
            style="?android:attr/progressBarStyle"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout marginStart="179dp"
            android:layout marginTop="318dp"
            android:layout_marginEnd="184dp"
            android:layout marginBottom="365dp"
            android:progress="0"
            app:layout constraintBottom toBottomOf="parent"
            app:layout constraintEnd toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
JAVA code:
package com.example.progressbar;
```

```
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
      @Override
      protected void onCreate(Bundle savedInstanceState) {
            super.onCreate(savedInstanceState);
            setContentView(R.layout.activity_main);
}
```





# Q2. Write a program to show the following output

### 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">
            android:id="@+id/b1"
           android:layout_width="wrap_content"
           android:layout height="wrap content"
           android:layout marginStart="192dp"
           android:layout_marginTop="396dp"
           android:layout_marginEnd="173dp"
            android:layout marginBottom="397dp"
           android:text="Donwload File"
           app:layout constraintBottom toBottomOf="parent"
            app:layout constraintEnd toEndOf="parent"
           app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

# JAVA code:

```
package com.example.progressbar_2;
import androidx.appcompat.app.AppCompatActivity;
import android.app.ProgressDialog;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
Button btn;
ProgressDialog pb;
int progressStatus=0;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
setContentView (R.layout. {\it activity\_main});
             btn=(Button)findViewById(R.id.\(\bar{b}1\));
             btn.setOnClickListener(new View.OnClickListener() {
                   @Override
                   public void onClick(View v) {
                        pb=new ProgressDialog(v.getContext());
                        pb.setMessage("File downloading...");
                        pb.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
                        pb.show();
                        new Thread(new Runnable() {
                               @Override
                               public void run() {
                                     try\{
                                            int i=0;
                                            while(i<=100) {
                                                   pb.setProgress(i);
                                                   Thread.sleep(100);
                                                   i = i + 1;
                                            if(i \ge 100){
                                                   pb.dismiss();
                                      catch (InterruptedException e){
                        }).start();
             });
      }
}
```

# Output:

