JAVA Program:

```
package com.example.broadcast;
import androidx.appcompat.app.AppCompatActivity;
import android.content.BroadcastReceiver;
import android.content.Intent;
import android.content.IntentFilter;
import android.os.Bundle;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
MyBroadcastReceiver myBroadcastReceiver;
TextView tv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        tv=findViewById(R.id.tv);
        myBroadcastReceiver=new MyBroadcastReceiver(tv);
    @Override
    protected void onStart(){
        registerReceiver(myBroadcastReceiver, new
IntentFilter(Intent.ACTION BATTERY CHANGED));
        super.onStart();
    @Override
    protected void onStop(){
        unregisterReceiver(myBroadcastReceiver);
        super.onStop();
```

```
import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import android.os.BatteryManager;
import android.widget.TextView;

public class MyBroadcastReceiver extends BroadcastReceiver {
    TextView tv; public MyBroadcastReceiver(TextView tv) {
        this.tv = tv;
    }
    @Override
    public void onReceive(Context context, Intent intent) {
        int percentage = intent.getIntExtra(BatteryManager.EXTRA_LEVEL,0);
        tv.setText("Battery Level:"+percentage);
    }
}
```

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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="Broadcast"
        android:textAlignment="center"
        android:textSize="30sp
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintLeft toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout constraintVertical bias="0.1"
        android:gravity="center horizontal" />
    <TextView
        android:id="@+id/tv"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="Battery level'
        android:textAlignment="center"
        android:textSize="24sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout constraintLeft toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.3"
        android:gravity="center_horizontal" />
    <ImageView</pre>
        android:id="@+id/imageView"
        android:layout width="259dp"
        android:layout_height="95dp"
        app:srcCompat="@drawable/battery"
        app:layout constraintBottom toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout constraintVertical bias="0.9" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

OUTPUT:

