



**19BIT0292**

**Bhaumik Tandan**

**MOBILE APPLICATION**  
**DEVELOPMENT**

**ASSIGNMENT-2**

**Implement the following features/ functionalities in your program and upload your own exercises with output. Output should be Unique:**

- 1. Splash Screen**
- 2. Card View**
- 3. Recycler view**

**NOTE: ALL OF THE ABOVE HAS BEEN IMPLEMENTED ON THE SAME APPLICATION**

**[CLICK HERE FOR GITHUBB LINK OF THE CODE](#)**

**[CLICK HERE FOR THE APK OF THE APPLICATION](#)**

# ANDROID MANIFEST.xml

## CODE

```
<?xml version="1.0" encoding="utf-8"?>

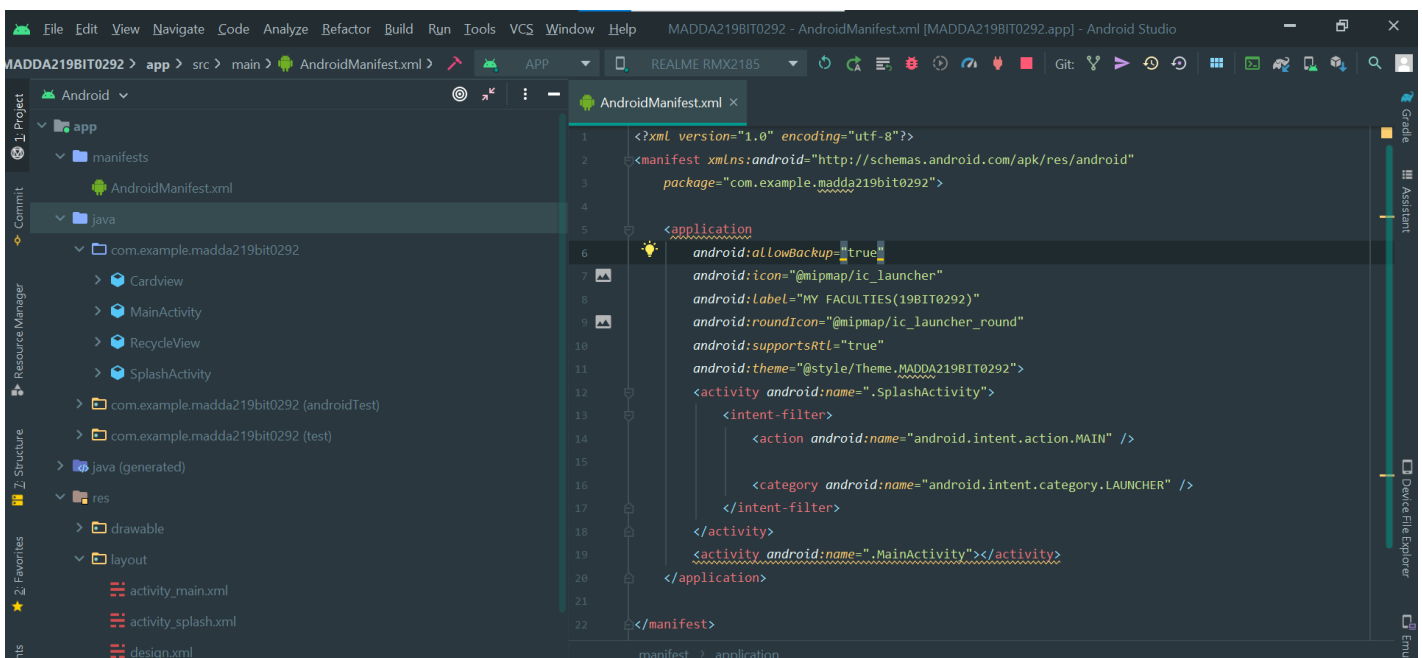
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.madda219bit0292">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="MY FACULTIES(19BIT0292)"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.MADDA219BIT0292">
        <activity android:name=".SplashActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".MainActivity"></activity>
    </application>

</manifest>
```

## SCREENSHOT



# MainActivity.java

## CODE

```
package com.example.madda219bit0292;

import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import java.util.ArrayList;
import java.util.List;


public class MainActivity extends AppCompatActivity {

    RecyclerView r;
    LinearLayoutManager lm;
    List<Cardview> ul;
    RecyclerView a;


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


    private void initData() {
        ul = new ArrayList<>();
        ul.add(new Cardview(R.drawable.rg, "RAMYA.G", "ITE1006 - Theory of Computation",
            "F1+TF1"));
        ul.add(new Cardview(R.drawable.mgk, "MANGAYARKARASI R", "ITE1008 - Open Source
```

```

        programming", "C1+TC1"));

ul.add(new Cardview(R.drawable.rc, "RAJESWARI C", "ITE1014 - Human Computer
        Interaction", "G1+TG1"));

ul.add(new Cardview(R.drawable.sp, "SRINIVASAN P", "ITE1016 - Mobile Application
        Development", "B1+TB1"));

ul.add(new Cardview(R.drawable.dm, "DEEPA M", "ITE2001 - Computer Architecture and
        Organization", "A1+TA1"));

ul.add(new Cardview(R.drawable.sk, "SENTHIL KUMAR P", "ITE2002 - Operating
        Systems", "B2+TB2"));

ul.add(new Cardview(R.drawable.rn, "RANICHANDRA C", "ITE2006 - Data Mining
        Techniques", "D1+TD1"));

ul.add(new Cardview(R.drawable.e, "ETHNUS (APT)", "STS2202 - Advanced Aptitude and
        Reasoning Skills", "E1+TE1"));

    }

    private void initRecylerView() {

        r = findViewById(R.id.rv);

        lm = new LinearLayoutManager(this);

        lm.setOrientation(RecyclerView.VERTICAL);

        r.setLayoutManager(lm);

        a = new RecyclerView(ul);

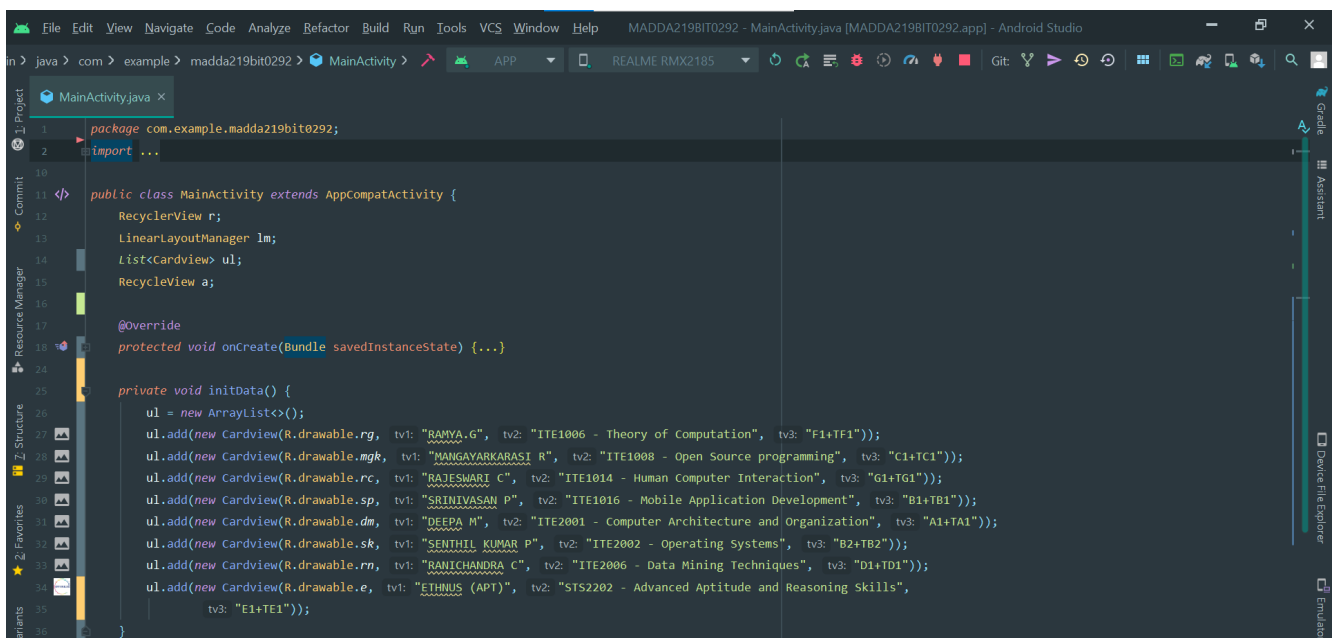
        r.setAdapter(a);

        a.notifyDataSetChanged();

    }
}

```

## SCREENSHOT



# activity\_main.xml

## CODE

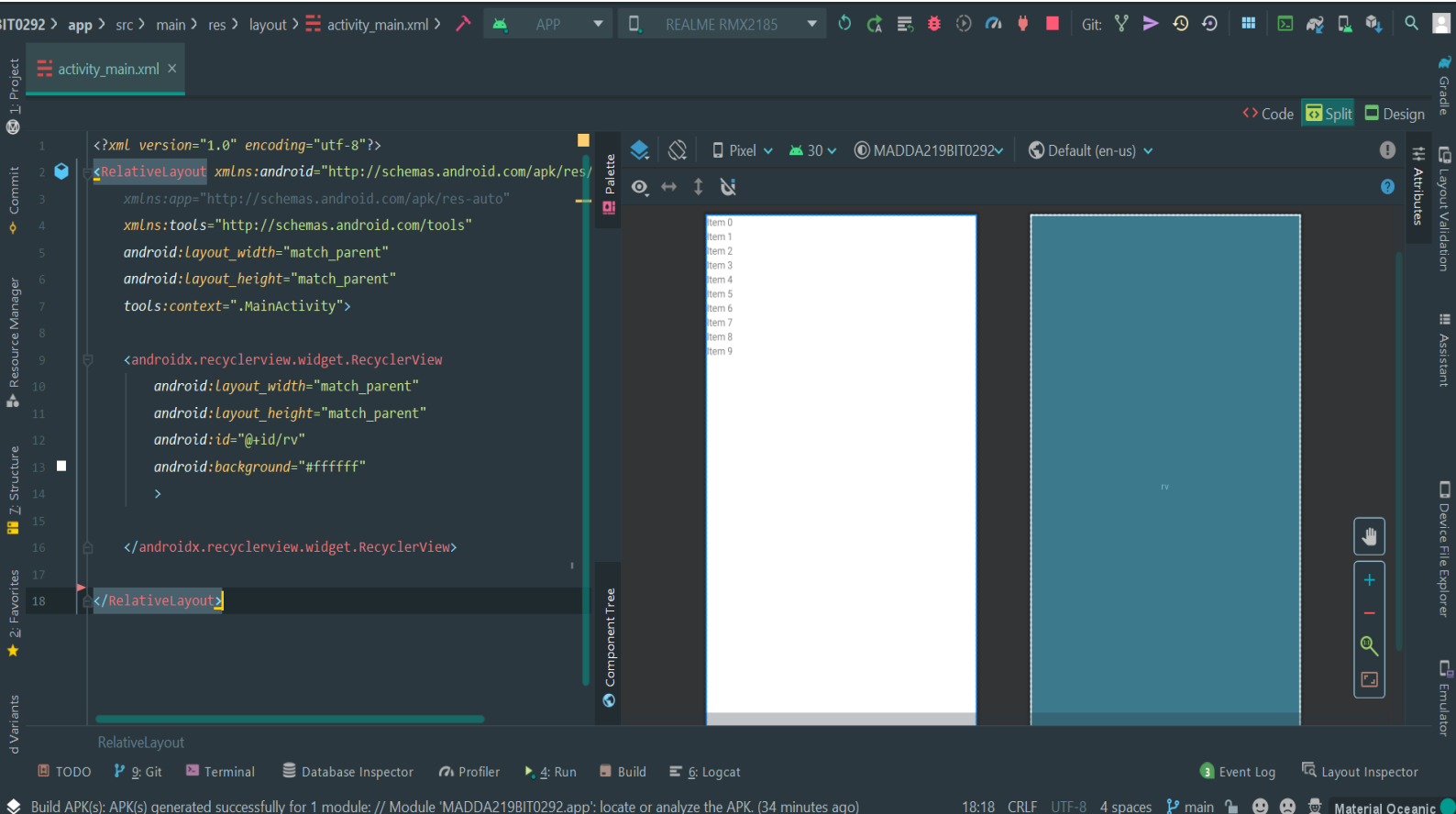
```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <androidx.recyclerview.widget.RecyclerView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/rv"
        android:background="#ffffff"
        >

    </androidx.recyclerview.widget.RecyclerView>

</RelativeLayout>
```

## SCREENSHOT



# SplashActivity.java

## CODE

```
package com.example.madda219bit0292;

import android.content.Intent;
import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;

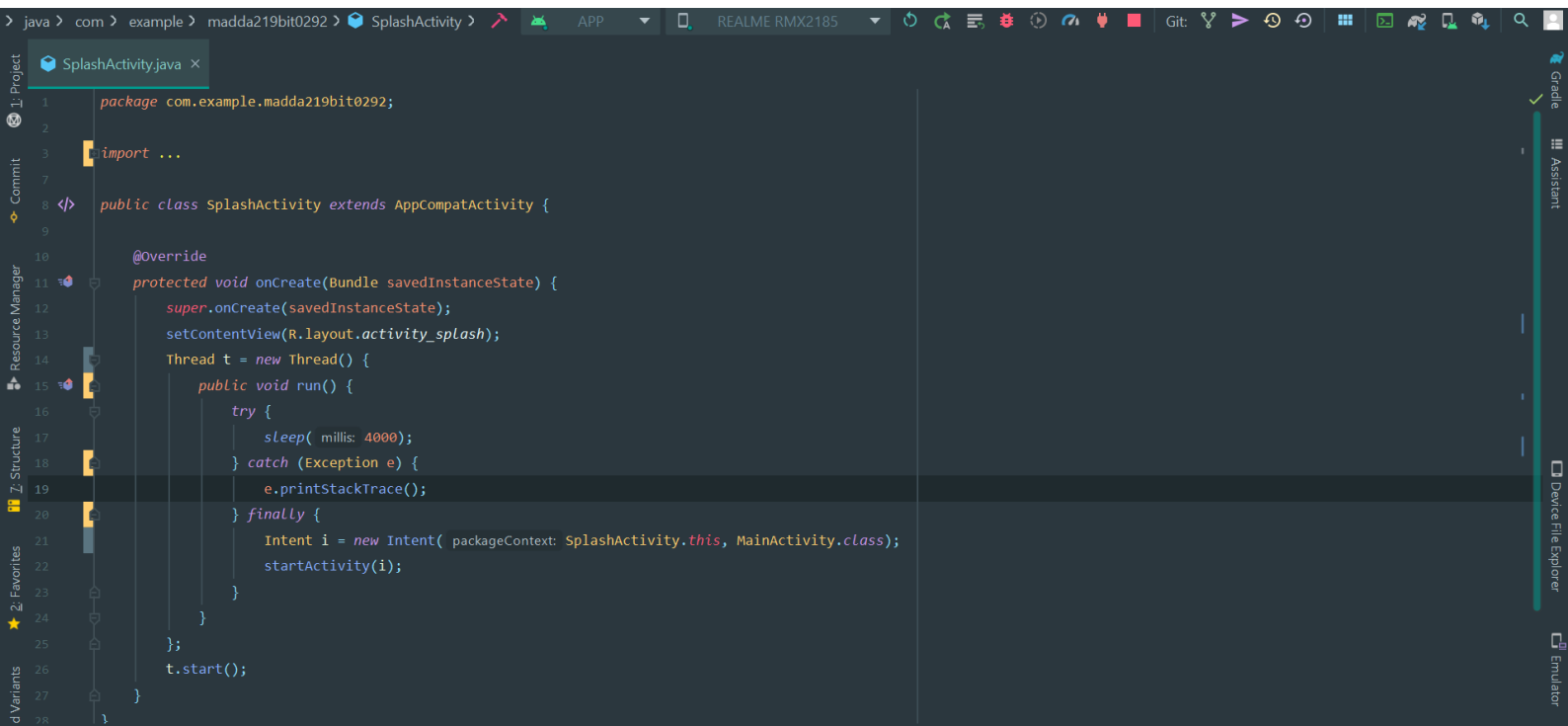
public class SplashActivity extends AppCompatActivity {

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

        Thread t = new Thread() {
            public void run() {
                try {
                    sleep(4000);
                } catch (Exception e) {
                    e.printStackTrace();
                } finally {
                    Intent i = new Intent(SplashActivity.this, MainActivity.class);
                    startActivity(i);
                }
            }
        };

        t.start();
    }
}
```

# SCREENSHOT



## activity\_splash.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=".SplashActivity">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="536dp"
        android:text="WELCOME"
        android:textColor="#E91E63"
        android:textSize="60dp"
        android:textStyle="bold">
```

```

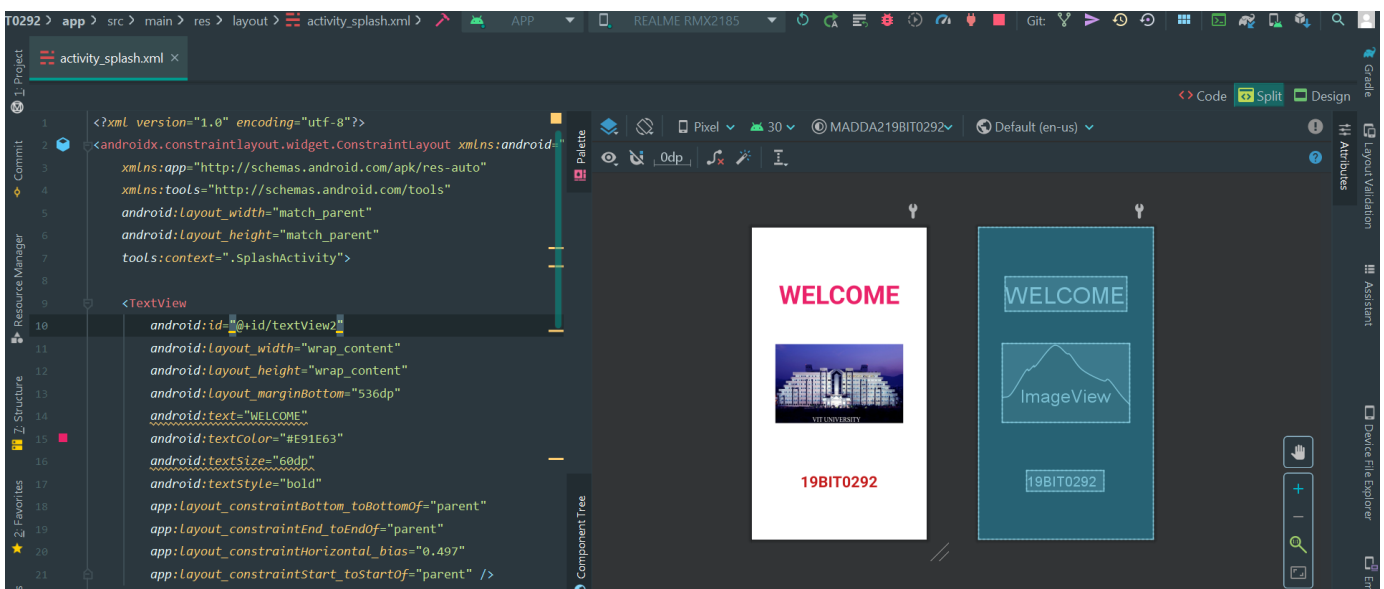
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent" />

<ImageView
    android:id="@+id/imageView2"
    android:layout_width="301dp"
    android:layout_height="185dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:srcCompat="@drawable/vit" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="297dp"
    android:text="19BIT0292"
    android:textColor="#C11919"
    android:textSize="36sp"
    android:textStyle="bold"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.497"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="@+id/imageView2"
    app:layout_constraintVertical_bias="0.0" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

## SCREENSHOT





# design.xml

## CODE

```
<?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="wrap_content"
    xmlns:app="http://schemas.android.com/apk/res-auto">

    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="#ffffff">

        <androidx.cardview.widget.CardView

            android:id="@+id/image"
            android:layout_width="60dp"
            android:layout_height="wrap_content"
            android:layout_marginLeft="20dp"
            android:layout_marginTop="20dp"
            app:cardCornerRadius="60dp">

            <ImageView
                android:id="@+id/imageview2"
                android:layout_width="60dp"
                android:layout_height="60dp"
                android:scaleType="centerCrop"
                android:src="@mipmap/ic_launcher_round"></ImageView>

        </androidx.cardview.widget.CardView>

        <TextView
            android:id="@+id/tv1"
            android:layout_width="120dp"
            android:layout_height="30dp"
```

```
        android:layout_marginLeft="20dp"
        android:layout_marginTop="20dp"
        android:layout_toRightOf="@id/image"
        android:text="Bhaumik Tandan"
        android:textColor="#000000"
        android:textSize="20sp">
```

```
</TextView>
```

```
<TextView
    android:id="@+id/tv2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/tv1"
    android:layout_marginLeft="20dp"
    android:layout_toRightOf="@id/image"
    android:text="Bachelor of Technology"
    android:textSize="15sp">
```

```
</TextView>
```

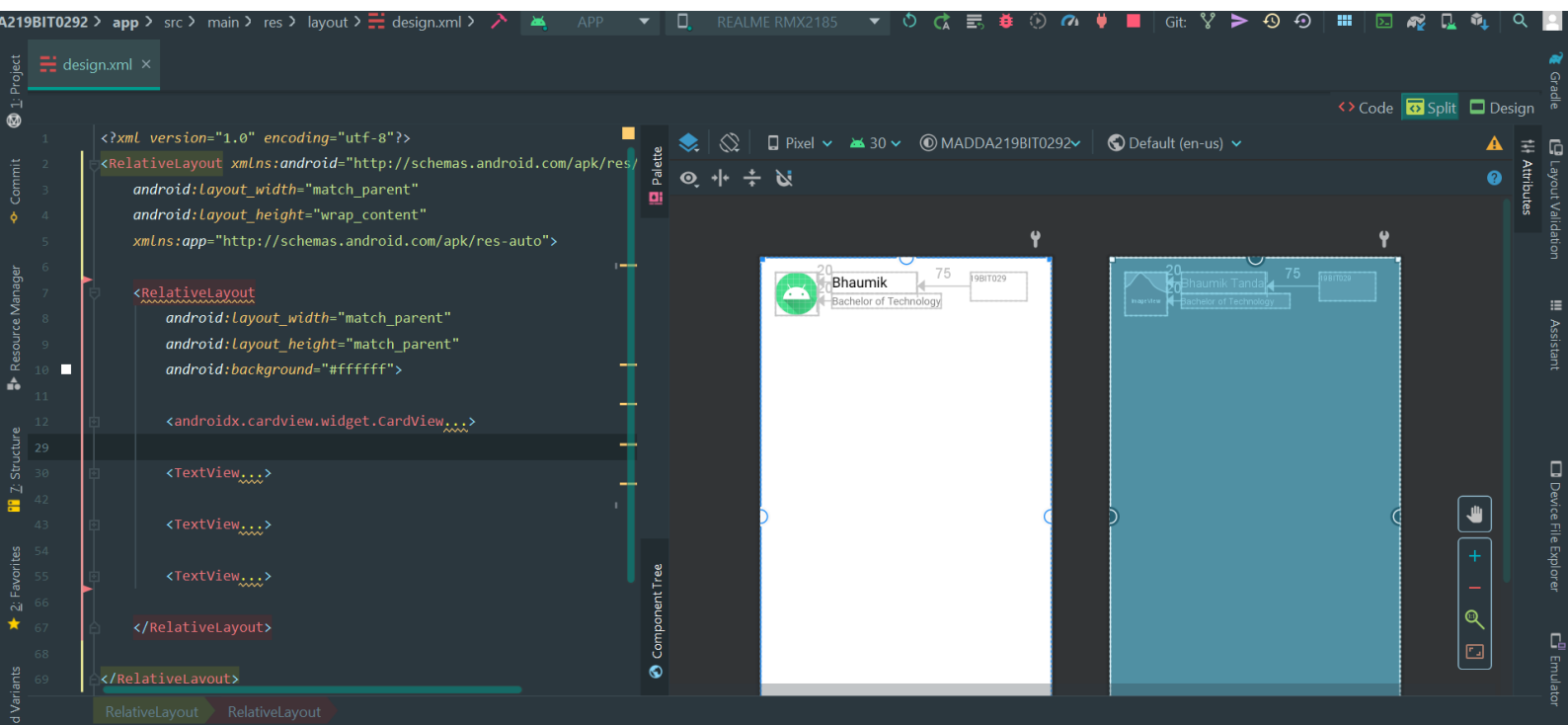
```
<TextView
    android:id="@+id/tv3"
    android:layout_width="80dp"
    android:layout_height="40dp"
    android:layout_marginLeft="75dp"
    android:layout_marginTop="20dp"
    android:layout_toRightOf="@id/tv1"
    android:text="19BIT029"
    android:textSize="12sp">
```

```
</TextView>
```

```
</RelativeLayout>
```

```
</RelativeLayout>
```

# SCREENSHOT



## Cardview.java

### CODE

```
package com.example.madda219bit0292;

public class Cardview
{
    private int imageView2;
    private String tv1;
    private String tv2;
    private String tv3;

    public Cardview(int imageView2, String tv1, String tv2, String tv3) {
        this.imageView2 = imageView2;
        this.tv1 = tv1;
        this.tv2 = tv2;
        this.tv3 = tv3;
    }
}
```

```

    public int getImageView2()
    {
        return imageView2;
    }

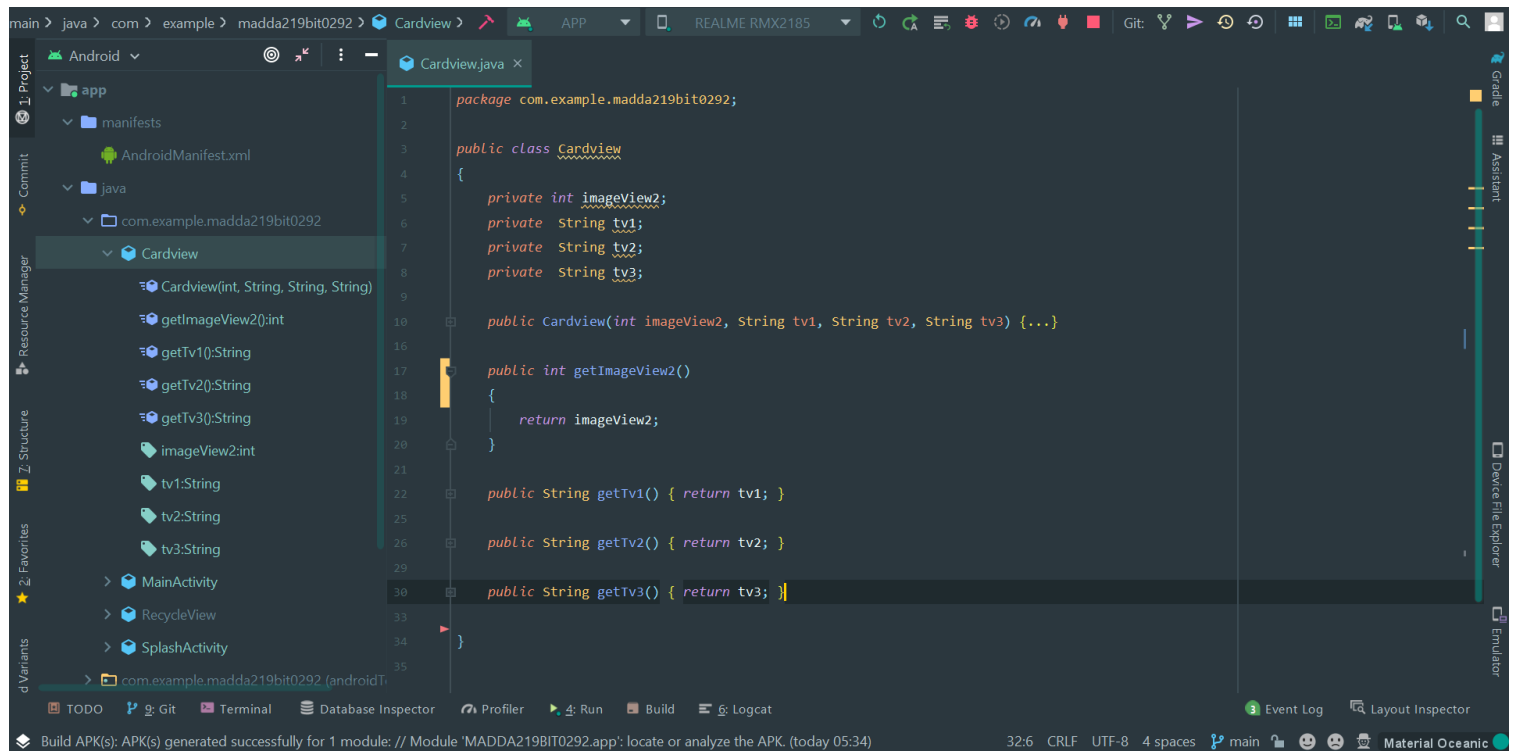
    public String getTv1() {
        return tv1;
    }

    public String getTv2() {
        return tv2;
    }

    public String getTv3() {
        return tv3;
    }
}

```

## SCREENSHOT



# RecyclerView.java

## CODE

```
package com.example.madda219bit0292;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.TextView;

import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;

import java.util.List;

public class RecyclerView extends RecyclerView.Adapter<RecyclerView.ViewHolder> {

    private List<Cardview> teacherList;

    public RecyclerView(List<Cardview> teacherList) {

        this.teacherList = teacherList;
    }

    @NonNull
    @Override
    public RecyclerView.ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int
viewType) {

        View view=
LayoutInflater.from(parent.getContext()).inflate(R.layout.design,parent,false);

        return new ViewHolder(view);
    }

    @Override
    public void onBindViewHolder(@NonNull RecyclerView.ViewHolder holder, int
position) {

        int ph=teacherList.get(position).getImageView2();

        String n=teacherList.get(position).getTv1();

        String sh=teacherList.get(position).getTv2();

        String r=teacherList.get(position).getTv3();

        holder.setData(ph,n,sh,r);
    }

    @Override
```

```

public int getItemCount() {
    return teacherList.size();
}

public class ViewHolder extends RecyclerView.ViewHolder{
    private ImageView i;
    private TextView n;
    private TextView sh;
    private TextView r;

    public ViewHolder(@NonNull View iv) {
        super(iv);
        i = iv.findViewById(R.id.imageview2);
        n = iv.findViewById(R.id.tv1);
        sh =iv.findViewById(R.id.tv2);
        r =iv.findViewById(R.id.tv3);
    }

    public void setData(int ik,String nk,String shk,String rk){

        i.setImageResource(ik);
        n.setText(nk);
        sh.setText(shk);
        r.setText(rk);
    }
}

```

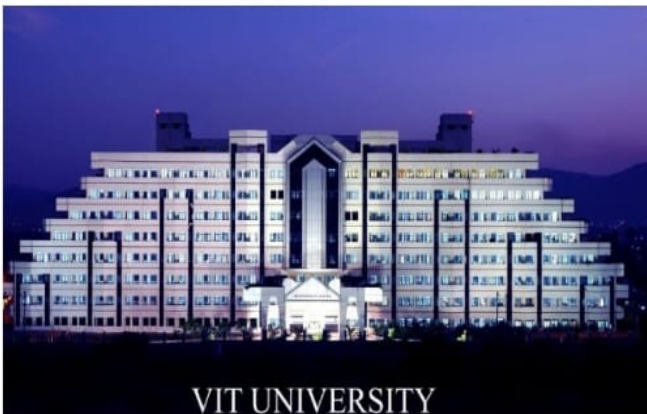
## SCREENSHOT

# OUTPUT

## SPLASH SCREEN

MY FACULTIES(19BIT0292)

# WELCOME



## 19BIT0292



## RECYCLE VIEW HAVING CARD VIEW

MY FACULTIES(19BIT0292)



**RAMYA.G**

F1+TF1

ITE1006 - Theory of Computation



**MANGAYA**

C1+TC1

ITE1008 - Open Source programming



**RAJESWARI**

G1+TG1

ITE1014 - Human Computer Interaction



**SRINIVASAN**

B1+TB1

ITE1016 - Mobile Application Development



**DEEPA M**

A1+TA1

ITE2001 - Computer Architecture and Organization



**SENTHIL**

B2+TB2

ITE2002 - Operating Systems



**RANICH**

D1+TD1

ITE2006 - Data Mining Techniques



**ETHNUS**

E1+TE1

STS2202 - Advanced Aptitude and Reasoning Skills

