//Slip –database program

```xml
<?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">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Name"
        android:id="@+id/textView"
        android:layout_alignParentTop="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Surname"
        android:id="@+id/textView2"
        android:layout_below="@+id/editText_name"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Marks"
        android:id="@+id/textView3"
        android:layout_below="@+id/editText_surname"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

```xml
        android:id="@+id/editText_name"
        android:layout_alignTop="@+id/textView"
        android:layout_toRightOf="@+id/textView"
        android:layout_toEndOf="@+id/textView" />

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/editText_surname"
        android:layout_alignTop="@+id/textView2"
        android:layout_toRightOf="@+id/textView2"
        android:layout_toEndOf="@+id/textView2" />

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/editText_Marks"
        android:layout_below="@+id/editText_surname"
        android:layout_toRightOf="@+id/textView3"
        android:layout_toEndOf="@+id/textView3" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Add Data"
        android:id="@+id/button_add"
        android:layout_below="@+id/editText_Marks"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_marginTop="76dp" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="View All"
        android:id="@+id/button_viewAll"
        android:layout_above="@+id/button_update"
        android:layout_centerHorizontal="true" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Update"
        android:id="@+id/button_update"
        android:layout_below="@+id/button_add"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />
```

```xml
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Delete"
        android:id="@+id/button_delete"
        android:layout_centerVertical="true"
        android:layout_below="@+id/button_viewAll"
        android:layout_alignLeft="@+id/button_viewAll"
        android:layout_alignStart="@+id/button_viewAll" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="id"
        android:id="@+id/textView_id"
        android:layout_below="@+id/editText_Marks"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/editText_id"
        android:layout_alignTop="@+id/textView_id"
        android:layout_toRightOf="@+id/textView3"
        android:layout_toEndOf="@+id/textView3" />


</RelativeLayout>
```

///DatabaseHelper.java

```java
package com.example.sqlite26;

import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
```

```java
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;


public class DatabaseHelper extends SQLiteOpenHelper {
    public static final String DATABASE_NAME = "Student.db";
    public static final String TABLE_NAME = "student_table";
    public static final String COL_1 = "ID";
    public static final String COL_2 = "NAME";
    public static final String COL_3 = "SURNAME";
    public static final String COL_4 = "MARKS";

    public DatabaseHelper(Context context)
    {
        super(context, DATABASE_NAME, null, 1);
    }

    @Override
    public void onCreate(SQLiteDatabase db) {
        db.execSQL("create table " + TABLE_NAME +" (ID INTEGER
PRIMARY KEY AUTOINCREMENT,NAME TEXT,SURNAME TEXT,MARKS
INTEGER)");

    }

    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int
newVersion) {
        db.execSQL("DROP TABLE IF EXISTS "+TABLE_NAME);
        onCreate(db);

    }
    public boolean insertData(String name,String surname,String
marks) {
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues contentValues = new ContentValues();
        contentValues.put(COL_2,name);
        contentValues.put(COL_3,surname);
        contentValues.put(COL_4,marks);
        long result = db.insert(TABLE_NAME,null ,contentValues);
        if(result == -1)
            return false;
        else
            return true;
    }
```

```java
    public Cursor getAllData() {
        SQLiteDatabase db = this.getWritableDatabase();
        Cursor res = db.rawQuery("select * from
"+TABLE_NAME,null);
        return res;
    }

    public boolean updateData(String id,String name,String
surname,String marks) {
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues contentValues = new ContentValues();
        contentValues.put(COL_1,id);
        contentValues.put(COL_2,name);
        contentValues.put(COL_3,surname);
        contentValues.put(COL_4,marks);
        db.update(TABLE_NAME, contentValues, "ID = ?",new
String[] { id });
        return true;
    }

    public Integer deleteData (String id) {
        SQLiteDatabase db = this.getWritableDatabase();
        return db.delete(TABLE_NAME, "ID = ?",new String[]
{id});
    }

}
```

////MainActivity.java

```java
package com.example.sqlite26;

import androidx.appcompat.app.AppCompatActivity;
import android.app.AlertDialog;
import android.database.Cursor;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
```

```java
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    DatabaseHelper myDb;
    EditText editName,editSurname,editMarks ,editTextId;
    Button btnAddData;
    Button btnviewAll;
    Button btnDelete;

    Button btnviewUpdate;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        myDb = new DatabaseHelper(this);

        editName = (EditText)findViewById(R.id.editText_name);
        editSurname =
(EditText)findViewById(R.id.editText_surname);
        editMarks = (EditText)findViewById(R.id.editText_Marks);
        editTextId = (EditText)findViewById(R.id.editText_id);
        btnAddData = (Button)findViewById(R.id.button_add);
        btnviewAll = (Button)findViewById(R.id.button_viewAll);
        btnviewUpdate= (Button)findViewById(R.id.button_update);
        btnDelete= (Button)findViewById(R.id.button_delete);
        AddData();
        viewAll();
        UpdateData();
        DeleteData();
    }
    public void DeleteData() {
        btnDelete.setOnClickListener(
                new View.OnClickListener() {
                    @Override
                    public void onClick(View v) {
                        Integer deletedRows =
myDb.deleteData(editTextId.getText().toString());
                        if(deletedRows > 0)

Toast.makeText(MainActivity.this,"Data
Deleted",Toast.LENGTH_LONG).show();
                        else

Toast.makeText(MainActivity.this,"Data not
Deleted",Toast.LENGTH_LONG).show();
```

```java
                    }
                }
            );
    }
    public void UpdateData() {
        btnviewUpdate.setOnClickListener(
                new View.OnClickListener() {
                    @Override
                    public void onClick(View v) {
                        boolean isUpdate =
myDb.updateData(editTextId.getText().toString(),
                                editName.getText().toString(),

editSurname.getText().toString(),editMarks.getText().toString())
;
                        if(isUpdate == true)

Toast.makeText(MainActivity.this,"Data
Update",Toast.LENGTH_LONG).show();
                        else

Toast.makeText(MainActivity.this,"Data not
Updated",Toast.LENGTH_LONG).show();
                    }
                }
            );
    }
    public  void AddData() {
        btnAddData.setOnClickListener(
                new View.OnClickListener() {
                    @Override
                    public void onClick(View v) {
                        boolean isInserted =
myDb.insertData(editName.getText().toString(),

editSurname.getText().toString(),
                                editMarks.getText().toString()
);
                        if(isInserted == true)

Toast.makeText(MainActivity.this,"Data
Inserted",Toast.LENGTH_LONG).show();
                        else

Toast.makeText(MainActivity.this,"Data not
Inserted",Toast.LENGTH_LONG).show();
                    }
```

```java
            }
        );
    }

    public void viewAll() {
        btnviewAll.setOnClickListener(
                new View.OnClickListener() {
                    @Override
                    public void onClick(View v) {
                        Cursor res = myDb.getAllData();
                        if(res.getCount() == 0) {
                            // show message
                            showMessage("Error","Nothing found");
                            return;
                        }

                        StringBuffer buffer = new StringBuffer();
                        while (res.moveToNext()) {
                    buffer.append("Id :"+ res.getString(0)+"\n");
                    buffer.append("Name :"+ res.getString(1)+"\n");
                    buffer.append("Surname :"+ res.getString(2)+"\n");
                    buffer.append("Marks :"+ res.getString(3)+"\n\n");
                        }

                        // Show all data
                        showMessage("Data",buffer.toString());
                    }
                }
        );
    }

    public void showMessage(String title,String Message){
        AlertDialog.Builder builder = new
AlertDialog.Builder(this);
        builder.setCancelable(true);
        builder.setTitle(title);
        builder.setMessage(Message);
        builder.show();
    }


    }
```
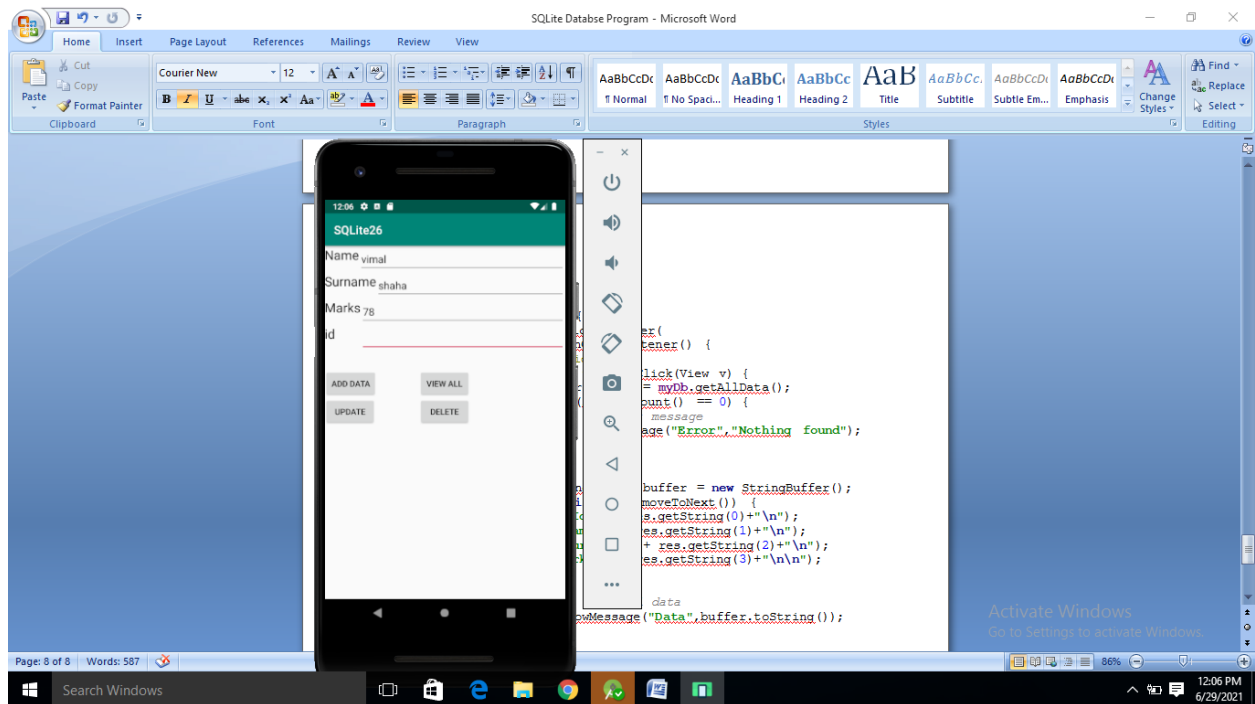

Slip1_2 /slip16_2

TimeDemo(TimePicker DatePicker)

//MainActivity.java

```java
package com.example.timedemo;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.DatePicker;
import android.widget.TimePicker;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    TimePicker tp;
    DatePicker dp;
```

```java
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        tp=(TimePicker)findViewById(R.id.timePicker);
        // tp.setIs24HourView(true);
        dp=(DatePicker)findViewById(R.id.datePicker);


    }
    public void onClick(View view) {

        Toast.makeText(getBaseContext(),
                "Time Selected"+tp.getHour()+":"+tp.getMinute(),
                Toast.LENGTH_SHORT).show();
    }

    public void showDate(View view) {

        Toast.makeText(getBaseContext(),
                "date selected"+(dp.getMonth()+1)+
                        "/"+dp.getDayOfMonth()+
                        "/"+dp.getYear(),
                Toast.LENGTH_SHORT).show();
    }
}
```

//activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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"
    android:orientation="vertical"
    tools:context=".MainActivity">


    <TimePicker
        android:id="@+id/timePicker"
        android:layout_width="wrap_content"
        android:layout_height="238dp" />
```

```xml
<Button
    android:id="@+id/btnSet"
    android:layout_width="70dp"
    android:layout_height="31dp"
    android:onClick="onClick"
    tools:layout_editor_absoluteX="174dp"
    tools:layout_editor_absoluteY="193dp" />

<DatePicker
    android:id="@+id/datePicker"
    android:layout_width="wrap_content"
    android:layout_height="238dp" />

<Button
    android:id="@+id/btndt"
    android:layout_width="70dp"
    android:layout_height="31dp"
    android:onClick="showDate"
    tools:layout_editor_absoluteX="174dp"
    tools:layout_editor_absoluteY="193dp" />
</LinearLayout>
```
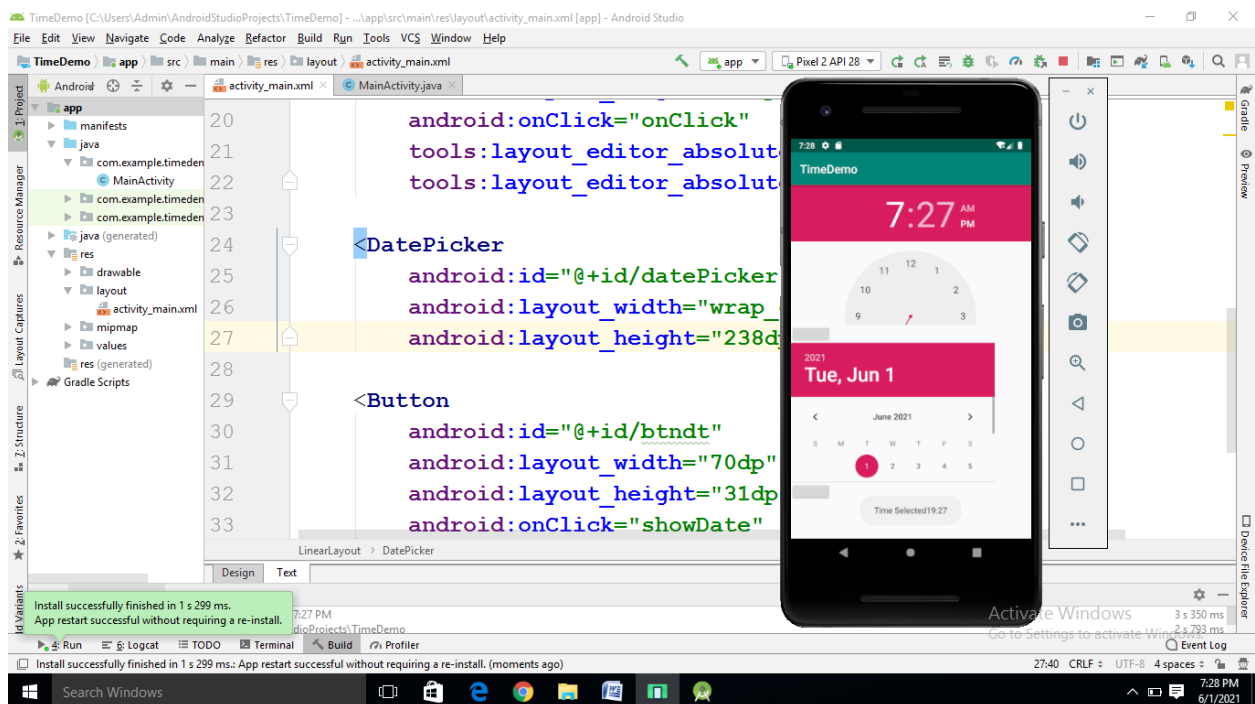

Slip19_1/slip10_1

BasicViews(Toggle Button)

//MainActivity.java

```java
package com.example.basicviews;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;
import android.widget.ToggleButton;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Button btsave=(Button)findViewById(R.id.button1);
        btsave.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Toast.makeText(getBaseContext(),"you clicked
save button",Toast.LENGTH_SHORT).show();

            }
        });
        Button btopen=(Button)findViewById(R.id.button2);
        btopen.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Toast.makeText(getBaseContext(),"you clicked
open button",Toast.LENGTH_SHORT).show();
            }
        });
        final CheckBox
chk=(CheckBox)findViewById(R.id.checkBox);
        chk.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if (((CheckBox)v).isChecked())
```

```java
                    Toast.makeText(getBaseContext(),"you checked
check box1 button",Toast.LENGTH_SHORT).show();
                else
                    Toast.makeText(getBaseContext(),"you
unchecked check box1 button",Toast.LENGTH_SHORT).show();
            }
        });
        RadioGroup rgb=(RadioGroup)findViewById(R.id.rdgrp1);
        rgb.setOnCheckedChangeListener(new
RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int
checkedId) {
                RadioButton rb1=
(RadioButton)findViewById(R.id.rd1);
                if (rb1.isChecked())
                {
                    Toast.makeText(getBaseContext(),"you checked
option1",Toast.LENGTH_SHORT).show();
                }
                else
                {
                    Toast.makeText(getBaseContext(),"you checked
option2",Toast.LENGTH_SHORT).show();
                }
            }
        });
        ToggleButton
tb=(ToggleButton)findViewById(R.id.toggle1);
        tb.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if(((ToggleButton)v).isChecked())
                {Toast.makeText(getBaseContext(),"toggle button
is on",Toast.LENGTH_SHORT).show();}
                else
                {Toast.makeText(getBaseContext(),"toggle button
is off",Toast.LENGTH_SHORT).show();}            }
        });
    }
}
```

//activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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="fill_parent"
    android:layout_height="fill_parent"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/button1"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"

        android:text="save" />

    <Button
        android:id="@+id/button2"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"

        android:text="open" />

    <ImageButton
        android:id="@+id/btnimg"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:src="@mipmap/pic3" />
    <TextView
        android:id="@+id/text1"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"/>


    <EditText
        android:id="@+id/editText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Name" />

    <CheckBox
        android:id="@+id/checkBox"
        android:layout_width="fill_parent"
```

```xml
            android:layout_height="wrap_content"
            android:text="CheckBox" />

    <CheckBox
            android:id="@+id/checkBox2"
style="?android:attr/starStyle"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="CheckBox" />

    <RadioGroup
            android:id="@+id/rdgrp1"
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:orientation="vertical" >

    <RadioButton
            android:id="@+id/rd1"
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:text="option1"/>
    <RadioButton
            android:id="@+id/rd2"
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:text="option2"/>
    </RadioGroup>
    <ToggleButton
            android:id="@+id/toggle1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content" />
</LinearLayout>
```
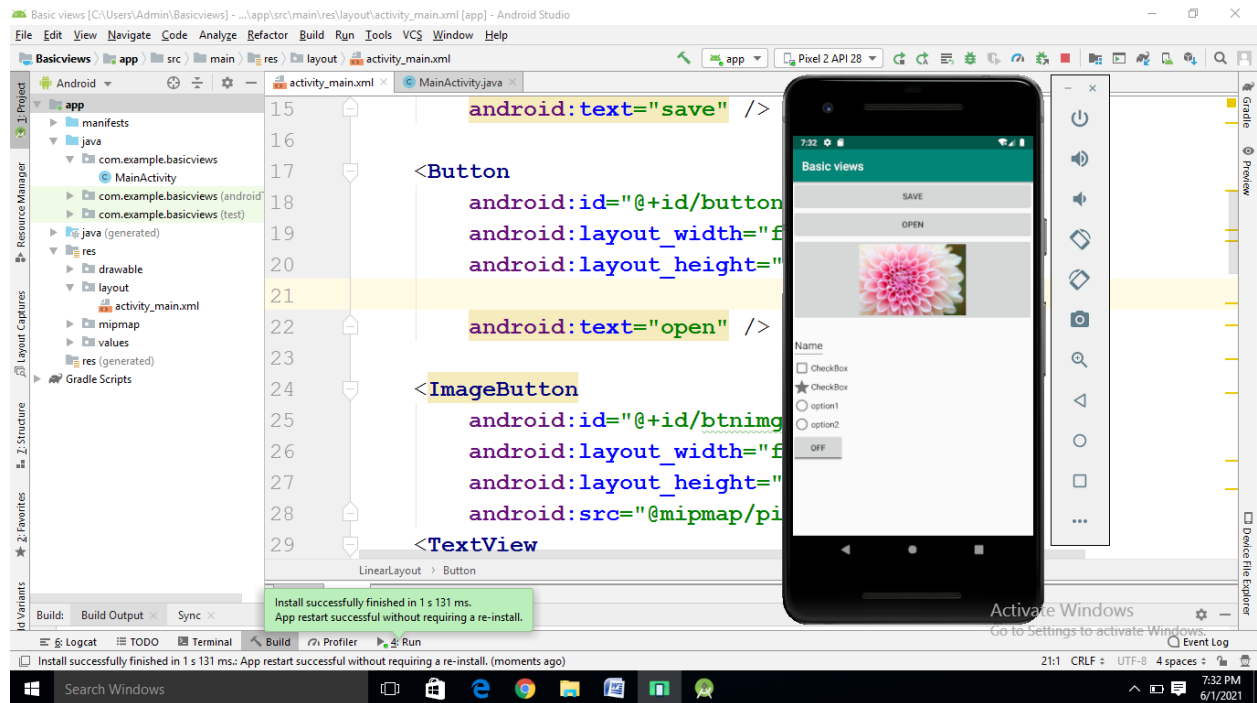
Slip1_1

Program to show lifecycle of activity

MainActivity.java

```java
package com.example.tybca;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;

import android.os.Bundle;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
String tag="Events";

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

```java
        Log.d(tag,"in on create event");
        //Displaying Toast with Hello Javatpoint message
        Toast.makeText(getApplicationContext(),"Hello TYBCA
Student",Toast.LENGTH_SHORT).show();


    }

    @Override
    public void onStart() {
        super.onStart();
        Log.d(tag,"in on start event");
    }

    @Override
    public void onStop() {
        super.onStop();
        Log.d(tag,"in on stop event");
    }



    @Override
    protected void onResume() {
        super.onResume();
        Log.d(tag,"in on resume event");
    }

    @Override
    public void onPause() {
        super.onPause();
        Log.d(tag,"in on pause event");

    }


    @Override
    protected void onDestroy() {
        super.onDestroy();
        Log.d(tag,"in on Destroy event");
    }
}
```
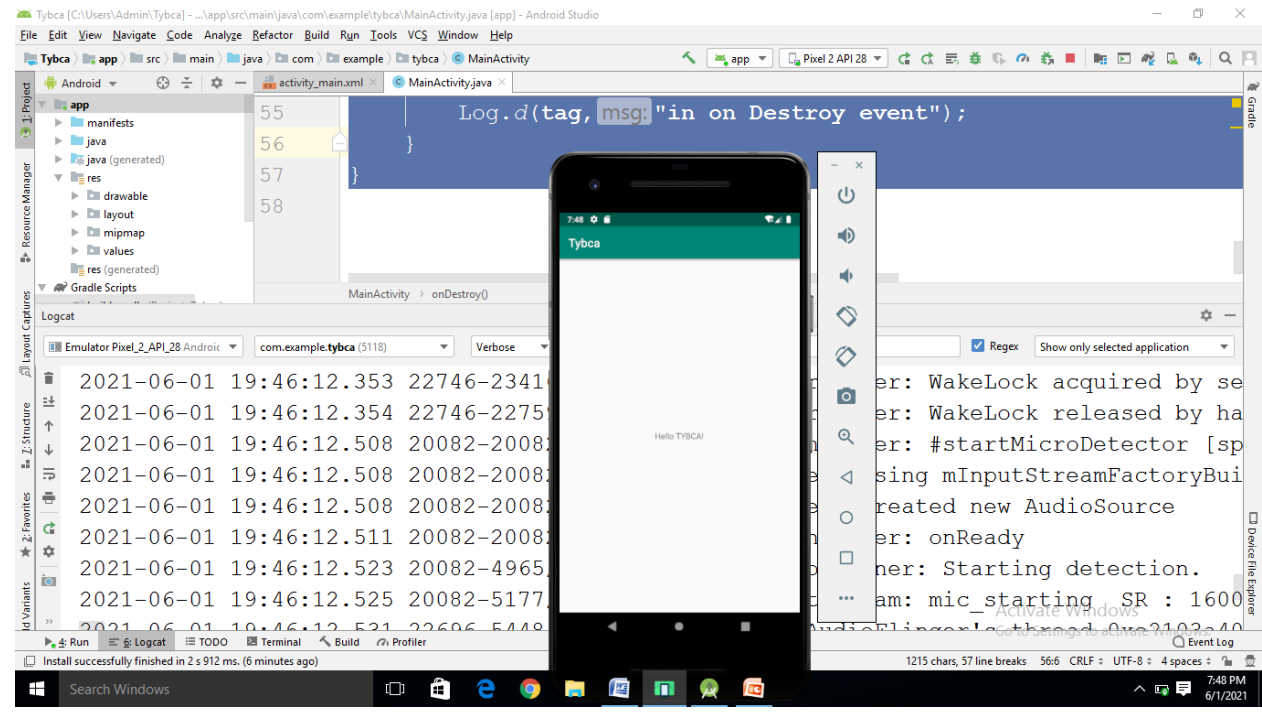
Slip2_2

```java
package com.example.maptest;

import androidx.fragment.app.FragmentActivity;

import android.os.Bundle;

import com.google.android.gms.maps.CameraUpdateFactory;
import com.google.android.gms.maps.GoogleMap;
import com.google.android.gms.maps.OnMapReadyCallback;
import com.google.android.gms.maps.SupportMapFragment;
import com.google.android.gms.maps.model.LatLng;
import com.google.android.gms.maps.model.MarkerOptions;

public class MapsActivity extends FragmentActivity implements
OnMapReadyCallback {

    private GoogleMap mMap;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_maps);
        // Obtain the SupportMapFragment and get notified when
the map is ready to be used.
        SupportMapFragment mapFragment = (SupportMapFragment)
getSupportFragmentManager()
                .findFragmentById(R.id.map);
        mapFragment.getMapAsync(this);
    }


    /**
     * Manipulates the map once available.
     * This callback is triggered when the map is ready to be
used.
     * This is where we can add markers or lines, add listeners
or move the camera. In this case,
     * we just add a marker near Sydney, Australia.
     * If Google Play services is not installed on the device,
the user will be prompted to install
     * it inside the SupportMapFragment. This method will only
be triggered once the user has
     * installed Google Play services and returned to the app.
     */
    @Override
    public void onMapReady(GoogleMap googleMap) {
        mMap = googleMap;

        // Add a marker in Sydney and move the camera
        LatLng sydney = new LatLng(-34, 151);
        mMap.addMarker(new
MarkerOptions().position(sydney).title("Marker in Sydney"));
        mMap.moveCamera(CameraUpdateFactory.newLatLng(sydney));
    }
}
```

slip5_2

//Google Map Zoom in ,Zoom-out Program

//MapsActivity.java

```java
package com.example.mygps;

import androidx.fragment.app.FragmentActivity;

import android.os.Bundle;
import android.view.KeyEvent;

import com.google.android.gms.maps.CameraUpdateFactory;
import com.google.android.gms.maps.GoogleMap;
import com.google.android.gms.maps.OnMapReadyCallback;
import com.google.android.gms.maps.SupportMapFragment;
import com.google.android.gms.maps.model.LatLng;
import com.google.android.gms.maps.model.MarkerOptions;

public class MapsActivity<onMapReady> extends
FragmentActivity implements OnMapReadyCallback {

    private GoogleMap mMap;

    @Override
    protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_maps);
        // Obtain the SupportMapFragment and get
notified when the map is ready to be used.
        SupportMapFragment mapFragment =
(SupportMapFragment) getSupportFragmentManager()
                .findFragmentById(R.id.map);
        mapFragment.getMapAsync(this);
    }



    /**
     * Manipulates the map once available.
     * This callback is triggered when the map is ready
to be used.
     * This is where we can add markers or lines, add
```

```java
listeners or move the camera. In this case,
     * we just add a marker near Sydney, Australia.
     * If Google Play services is not installed on the
device, the user will be prompted to install
     * it inside the SupportMapFragment. This method
will only be triggered once the user has
     * installed Google Play services and returned to
the app.
     */
    @Override
    public void onMapReady(GoogleMap googleMap) {
        mMap = googleMap;

        // Add a marker in Sydney and move the camera
        LatLng sydney = new LatLng(21, 78);
        mMap.addMarker(new
MarkerOptions().position(sydney).title("Marker in
Sydney"));

mMap.moveCamera(CameraUpdateFactory.newLatLng(sydney));
    }

    @Override
    public boolean onKeyDown(int keyCode, KeyEvent
event) {
        switch (keyCode)
        { case
KeyEvent.KEYCODE_3:mMap.animateCamera(CameraUpdateFacto
ry.zoomIn());
        break;
            case KeyEvent.KEYCODE_1
:mMap.animateCamera(CameraUpdateFactory.zoomOut());
        break;}

        return super.onKeyDown(keyCode, event);
    }


}
```
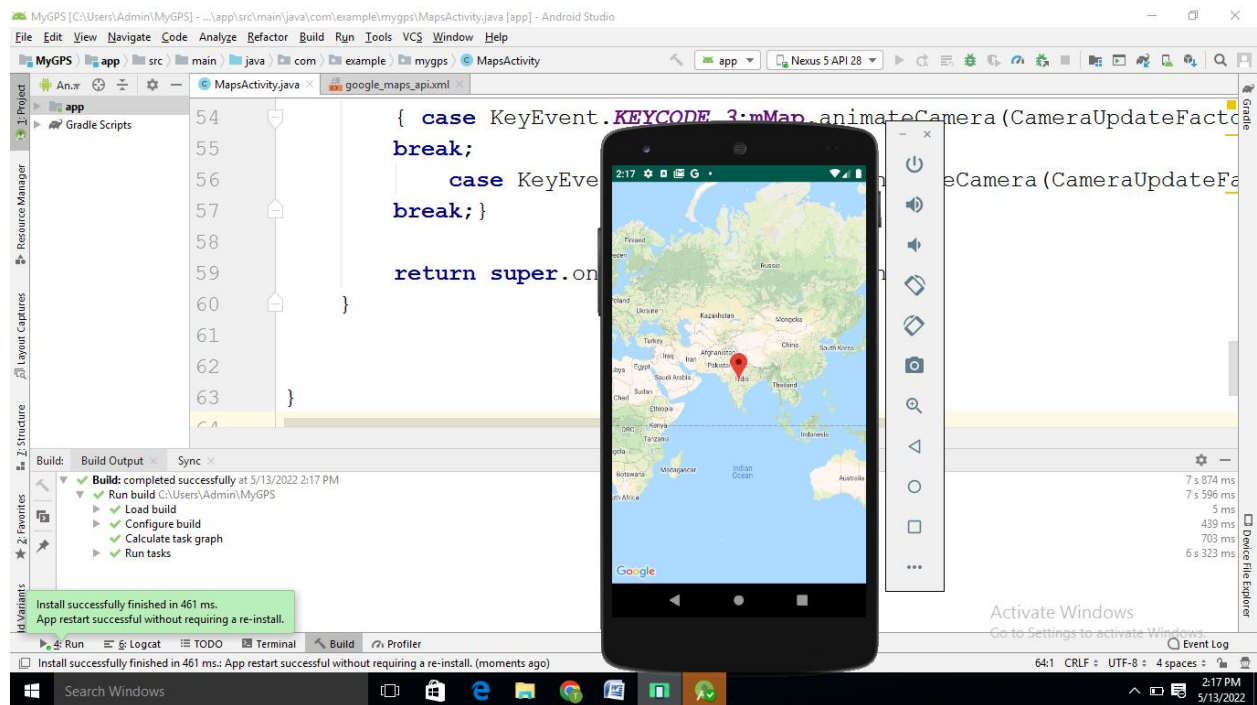
slip3_2 / slip15_2

//ActivityMain.java

```java
package com.example.slip3_2;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        final EditText editText = findViewById(R.id.name);

        final EditText text2=findViewById(R.id.sname);
        final EditText text3=findViewById(R.id.marks);


        Button button = findViewById(R.id.button);
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String name =
editText.getText().toString().trim();
                String sname=text2.getText().toString().trim();

                String marks =
text3.getText().toString().trim();
                Bundle bundle = new Bundle();

                bundle.putString("value1",name);
                bundle.putString("value2",sname);
                bundle.putString("value3",marks);
                Intent intent = new Intent(MainActivity.this,
SecondActivirt.class);
                intent.putExtras(bundle);
                startActivity(intent);


            }
        });
    }
}
```

//main_activity.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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"
    android:orientation="vertical"
```

```xml
    tools:context=".MainActivity">

    <EditText
        android:id = "@+id/name"
        android:layout_width = "match_parent"
        android:layout_height = "wrap_content"
        android:layout_gravity = "center"
        android:hint = "Enter  name"
        android:inputType = "text" />
    <EditText
        android:id = "@+id/sname"
        android:layout_width = "match_parent"
        android:layout_height = "wrap_content"
        android:layout_gravity = "center"
        android:hint = "Enter surname"
        android:inputType = "text" />
    <EditText
        android:id = "@+id/marks"
        android:layout_width = "match_parent"
        android:layout_height = "wrap_content"
        android:layout_gravity = "center"
        android:hint = "Enter marks"
        android:inputType = "text" />
    <Button
        android:id = "@+id/button"
        android:layout_width = "wrap_content"
        android:layout_height = "wrap_content"
        android:layout_gravity = "center"
        android:layout_marginTop = "16dp"
        android:text = "Next" />

</LinearLayout>



//SecondActivity.java
package com.example.slip3_2;

import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class SecondActivirt extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);
        Bundle bundle = getIntent().getExtras();
        if (bundle!= null) {
            String value = bundle.getString("value1");
            String value2 = bundle.getString("value2");
            String value3 = bundle.getString("value3");
            TextView textView = findViewById(R.id.text_view);
            TextView textView2 = findViewById(R.id.textryr);
            TextView textView3 =
findViewById(R.id.textcollection);
            textView.setText(value);
            textView2.setText(value2);
            textView3.setText(value3);



        }
    }
}


//activity_second.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
android:layout_width="match_parent"
    android:layout_height="match_parent">

    <TextView
        android:id = "@+id/text_view"
        android:layout_width = "match_parent"
        android:layout_height = "wrap_content"
        android:layout_gravity = "center" />
    <TextView
        android:id = "@+id/textryr"
        android:layout_width = "match_parent"
        android:layout_height = "wrap_content"
        android:layout_gravity = "center" />
    <TextView
        android:id = "@+id/textcollection"
        android:layout_width = "match_parent"
        android:layout_height = "wrap_content"
        android:layout_gravity = "center" />

</LinearLayout>
```
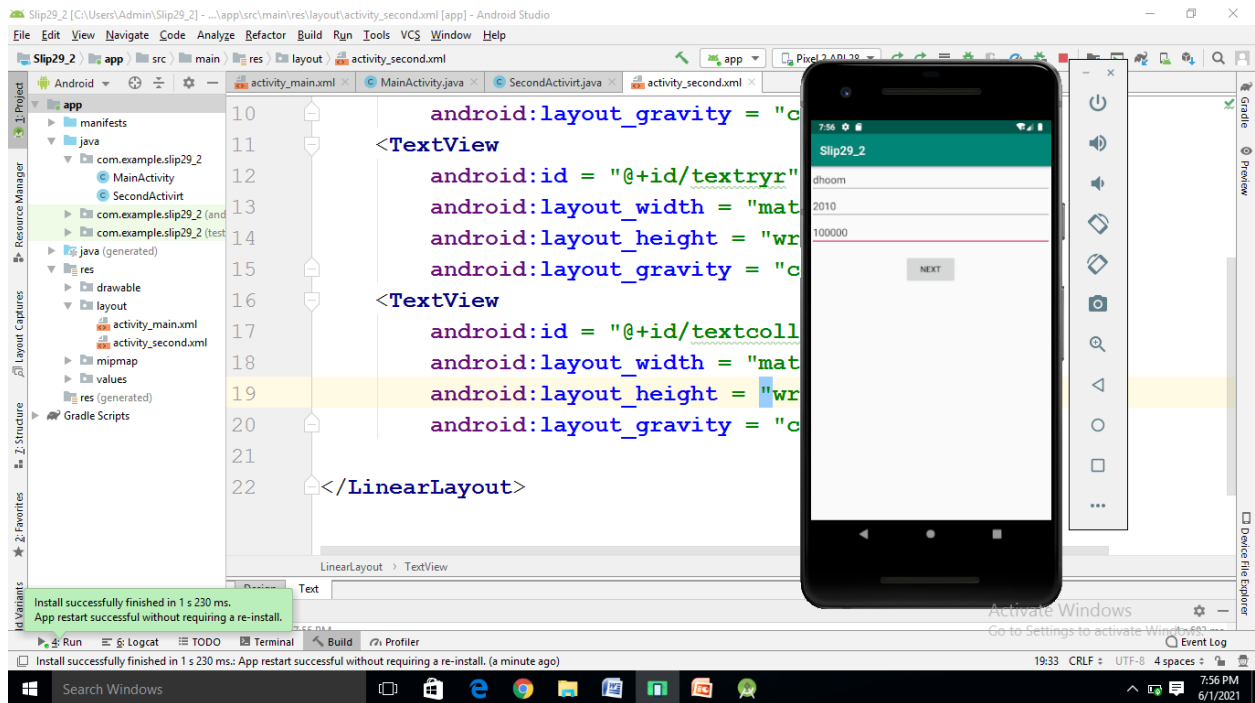
//slip13_1 (Scroll view)
//Activity_Main.java

```java
package com.example.slip22_1;

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);
    }
}
```

//activity_main.xml

```xml
<?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">

    <ScrollView
        android:layout_width="match_parent"
        android:layout_height="match_parent">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical">
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Button 1" />
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Button 2" />
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Button 3" />
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Button 4" />
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Button 5" />
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
```

```xml
                android:text="Button 6" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 7" />

            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 10" />

            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 8" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 9" />

            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 11" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 12" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 13" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 14" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
```

```xml
                android:layout_gravity="center"
                android:text="Button 15" />
            <Button
                android:layout_width="fill_parent"
                android:layout_height="wrap_content"
                android:text="Button 16" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 17" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 18" />

            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 19" />
            <Button
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="Button 20" />

        </LinearLayout>
    </ScrollView>


</androidx.constraintlayout.widget.ConstraintLayout>
```
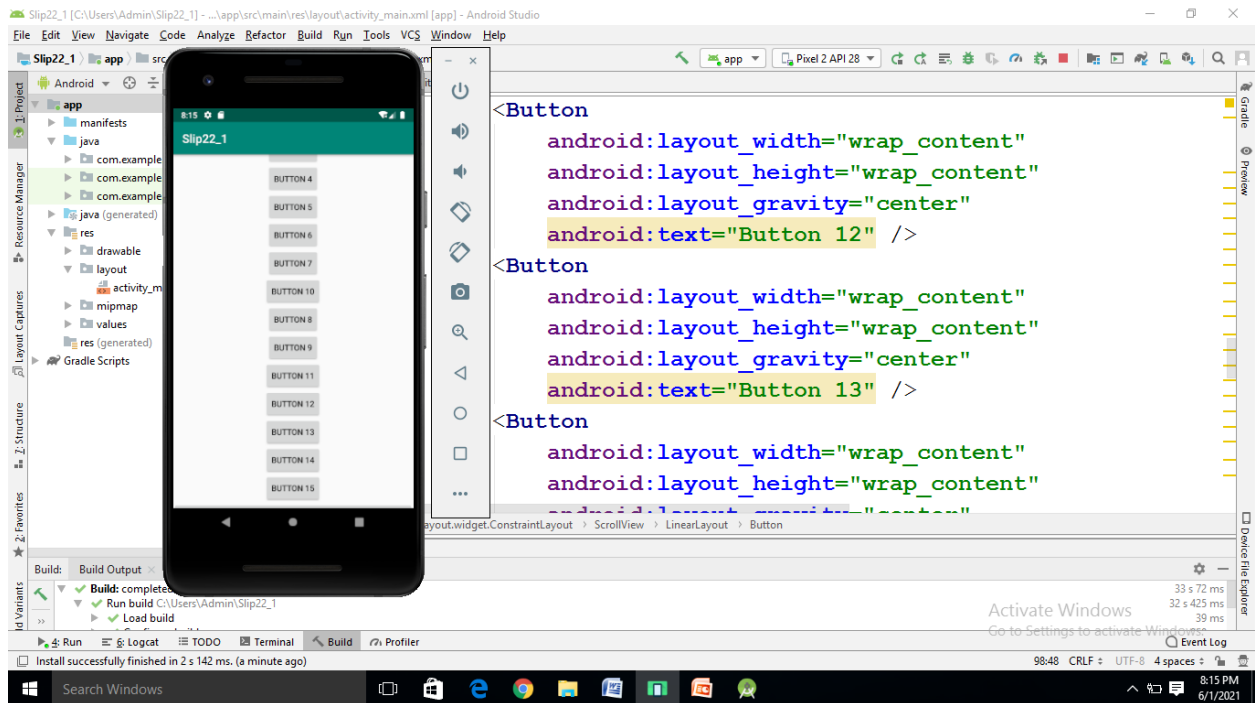
Slip16_2 // simple calculator

```xml
<?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">

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/edt1"/>


    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="1"
```

```xml
        android:id="@+id/button1"
        android:layout_marginTop="94dp"
        android:layout_below="@+id/edt1"
        android:layout_toStartOf="@+id/button4"
        android:layout_alignRight="@+id/button4"
        android:layout_alignEnd="@+id/button4" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="2"
        android:id="@+id/button2"
        android:layout_alignTop="@+id/button1"
        android:layout_toLeftOf="@+id/button3"
        android:layout_toStartOf="@+id/button3" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="3"
        android:id="@+id/button3"
        android:layout_alignTop="@+id/button2"
        android:layout_centerHorizontal="true" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="4"
        android:id="@+id/button4"
        android:layout_below="@+id/button1"
        android:layout_toLeftOf="@+id/button2" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="5"
        android:id="@+id/button5"
        android:layout_alignBottom="@+id/button4"
        android:layout_alignLeft="@+id/button2"
        android:layout_alignStart="@+id/button2" />

    <Button
        style="?android:attr/buttonStyleSmall"
```

```xml
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="6"
        android:id="@+id/button6"
        android:layout_below="@+id/button3"
        android:layout_alignLeft="@+id/button3"
        android:layout_alignStart="@+id/button3" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="7"
        android:id="@+id/button7"
        android:layout_below="@+id/button4"
        android:layout_toLeftOf="@+id/button2" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="8"
        android:id="@+id/button8"
        android:layout_below="@+id/button5"
        android:layout_alignLeft="@+id/button5"
        android:layout_alignStart="@+id/button5" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="9"
        android:id="@+id/button9"
        android:layout_below="@+id/button6"
        android:layout_alignLeft="@+id/button6"
        android:layout_alignStart="@+id/button6" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="+"
        android:id="@+id/buttonadd"
        android:layout_alignTop="@+id/button3"
        android:layout_toRightOf="@+id/button3"
        android:layout_marginLeft="46dp"
        android:layout_marginStart="46dp"
```

```xml
        android:layout_alignRight="@+id/edt1"
        android:layout_alignEnd="@+id/edt1" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="-"
        android:id="@+id/buttonsub"
        android:layout_below="@+id/buttonadd"
        android:layout_alignLeft="@+id/buttonadd"
        android:layout_alignStart="@+id/buttonadd"
        android:layout_alignRight="@+id/buttonadd"
        android:layout_alignEnd="@+id/buttonadd" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="*"
        android:id="@+id/buttonmul"
        android:layout_below="@+id/buttonsub"
        android:layout_alignLeft="@+id/buttonsub"
        android:layout_alignStart="@+id/buttonsub"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="."
        android:id="@+id/button10"
        android:layout_below="@+id/button7"
        android:layout_toLeftOf="@+id/button2" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="0"
        android:id="@+id/button0"
        android:layout_below="@+id/button8"
        android:layout_alignLeft="@+id/button8"
        android:layout_alignStart="@+id/button8" />

    <Button
```

```xml
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="C"
        android:id="@+id/buttonC"
        android:layout_below="@+id/button9"
        android:layout_alignLeft="@+id/button9"
        android:layout_alignStart="@+id/button9" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="/"
        android:id="@+id/buttondiv"
        android:layout_below="@+id/buttonmul"
        android:layout_alignLeft="@+id/buttonmul"
        android:layout_alignStart="@+id/buttonmul"
        android:layout_alignRight="@+id/buttonmul"
        android:layout_alignEnd="@+id/buttonmul" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="="
        android:id="@+id/buttoneql"
        android:layout_below="@+id/button0"
        android:layout_marginTop="37dp"
        android:layout_alignRight="@+id/buttondiv"
        android:layout_alignEnd="@+id/buttondiv"
        android:layout_alignLeft="@+id/button10"
        android:layout_alignStart="@+id/button10" />

</RelativeLayout>
```

```java
//MainAcivity.java
package com.example.slip2_2;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
```

```java
public class MainActivity extends AppCompatActivity {

    Button button0 , button1 , button2 , button3 , button4 ,
button5 , button6 ,
            button7 , button8 , button9 , buttonAdd , buttonSub
, buttonDivision ,
            buttonMul , button10 , buttonC , buttonEqual ;

    EditText edt1 ;

    float mValueOne , mValueTwo ;

    boolean mAddition , mSubtract ,mMultiplication ,mDivision ;

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

        button0 = (Button) findViewById(R.id.button0);
        button1 = (Button) findViewById(R.id.button1);
        button2 = (Button) findViewById(R.id.button2);
        button3 = (Button) findViewById(R.id.button3);
        button4 = (Button) findViewById(R.id.button4);
        button5 = (Button) findViewById(R.id.button5);
        button6 = (Button) findViewById(R.id.button6);
        button7 = (Button) findViewById(R.id.button7);
        button8 = (Button) findViewById(R.id.button8);
        button9 = (Button) findViewById(R.id.button9);
        button10 = (Button) findViewById(R.id.button10);
        buttonAdd = (Button) findViewById(R.id.buttonadd);
        buttonSub = (Button) findViewById(R.id.buttonsub);
        buttonMul = (Button) findViewById(R.id.buttonmul);
        buttonDivision = (Button) findViewById(R.id.buttondiv);
        buttonC = (Button) findViewById(R.id.buttonC);
        buttonEqual = (Button) findViewById(R.id.buttoneql);
        edt1 = (EditText) findViewById(R.id.edt1);


        button1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                edt1.setText(edt1.getText()+"1");
            }
        });
```

```java
button2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText()+"2");
    }
});

button3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText()+"3");
    }
});

button4.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText()+"4");
    }
});

button5.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText()+"5");
    }
});

button6.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText()+"6");
    }
});

button7.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText()+"7");
    }
});

button8.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText()+"8");
    }
```

```java
        });

        button9.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                edt1.setText(edt1.getText()+"9");
            }
        });

        button0.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                edt1.setText(edt1.getText()+"0");
            }
        });

        buttonAdd.setOnClickListener(new View.OnClickListener()
{

            @Override
            public void onClick(View v) {

                if (edt1 == null){
                    edt1.setText("");
                }else {
                    mValueOne = Float.parseFloat(edt1.getText()
+ "");

                    mAddition = true;
                    edt1.setText(null);
                }
            }
        });

        buttonSub.setOnClickListener(new View.OnClickListener()
{

            @Override
            public void onClick(View v) {
                mValueOne = Float.parseFloat(edt1.getText() +
"");

                mSubtract = true ;
                edt1.setText(null);
            }
        });

        buttonMul.setOnClickListener(new View.OnClickListener()
{

            @Override
            public void onClick(View v) {
```

```java
                mValueOne = Float.parseFloat(edt1.getText() +
"");
                mMultiplication = true ;
                edt1.setText(null);
            }
        });

        buttonDivision.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View v) {
                mValueOne = Float.parseFloat(edt1.getText()+"");
                mDivision = true ;
                edt1.setText(null);
            }
        });

        buttonEqual.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View v) {
                mValueTwo = Float.parseFloat(edt1.getText() +
"");

                if (mAddition == true){

                    edt1.setText(mValueOne + mValueTwo +"");
                    mAddition=false;
                }


                if (mSubtract == true){
                    edt1.setText(mValueOne - mValueTwo+"");

                    mSubtract=false;
                }

                if (mMultiplication == true){
                    edt1.setText(mValueOne * mValueTwo+"");
                    mMultiplication=false;
                }

                if (mDivision == true){
                    edt1.setText(mValueOne / mValueTwo+"");
                    mDivision=false;
                }
```

```
            }
        });

        buttonC.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                edt1.setText("");
            }
        });

        button10.setOnClickListener(
                new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                edt1.setText(edt1.getText()+".");
            }
        });
    }
```

}
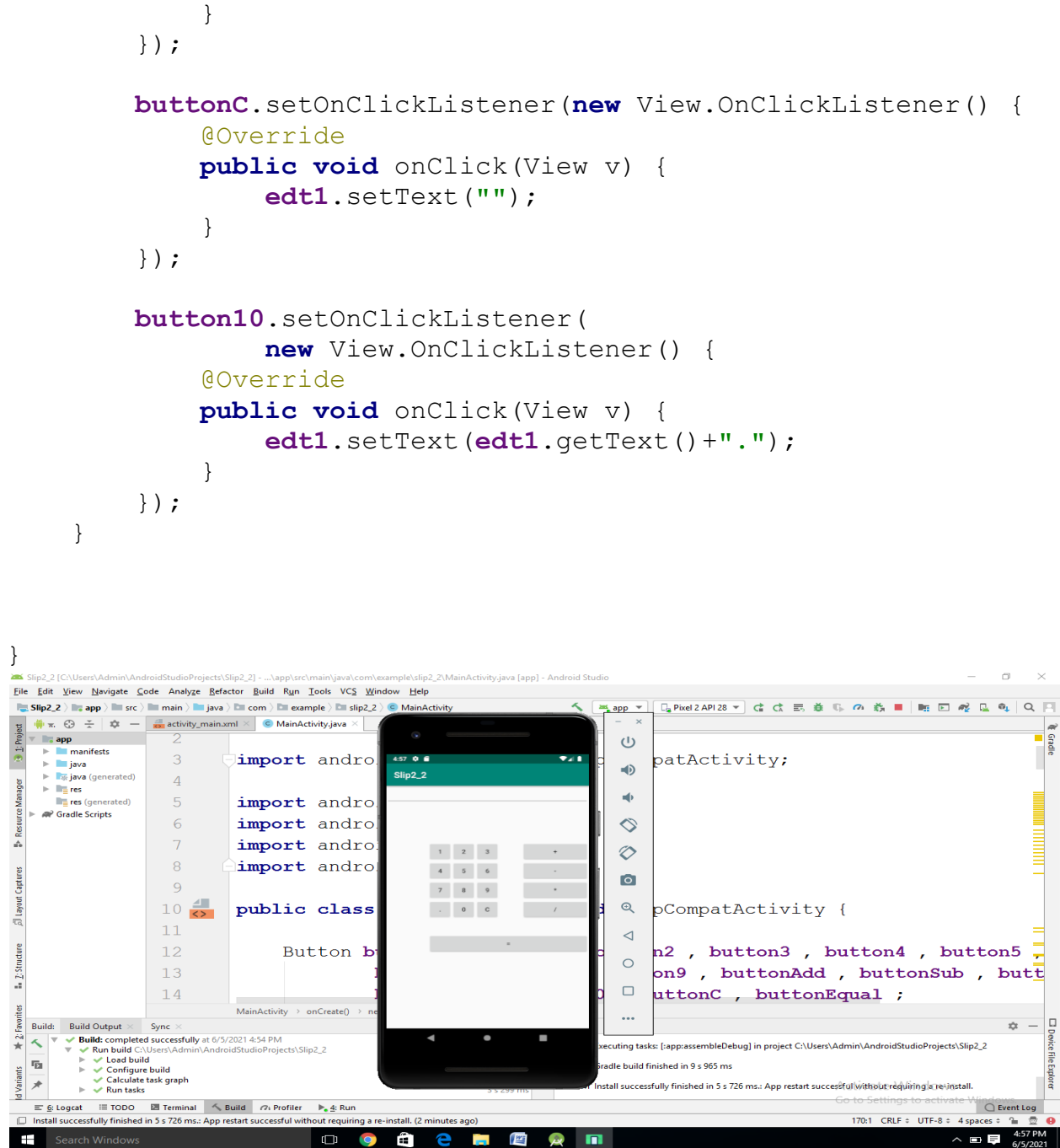
Slip15_1

Create Hello_world application that will display Hello world in middle of the screen in blue color with white background with border

//activity_main.xml

```xml
<?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"
    android:background="#000000"
    android:padding="10dp"

    tools:context=".MainActivity">
    <LinearLayout

android:layout_width="match_parent"

android:layout_height="match_parent"
```

```xml
        android:orientation="horizontal"

        android:background="@drawable/border">

            <TextView

        android:layout_width="fill_parent"

        android:layout_height="fill_parent"

        android:gravity="center_vertical|center_horizontal"
                android:text="Hello World!"
                android:background="#A00000FF"


                android:textColor="#ffffff"
                android:textSize="40sp" />
        </LinearLayout>

</RelativeLayout>
```

//border.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<shape
xmlns:android="http://schemas.android.com/apk/res/android"
```

```xml
        android:shape="rectangle">
        <stroke
            android:width="20dp"

android:color="#ffffff"></stroke>

</shape>
```
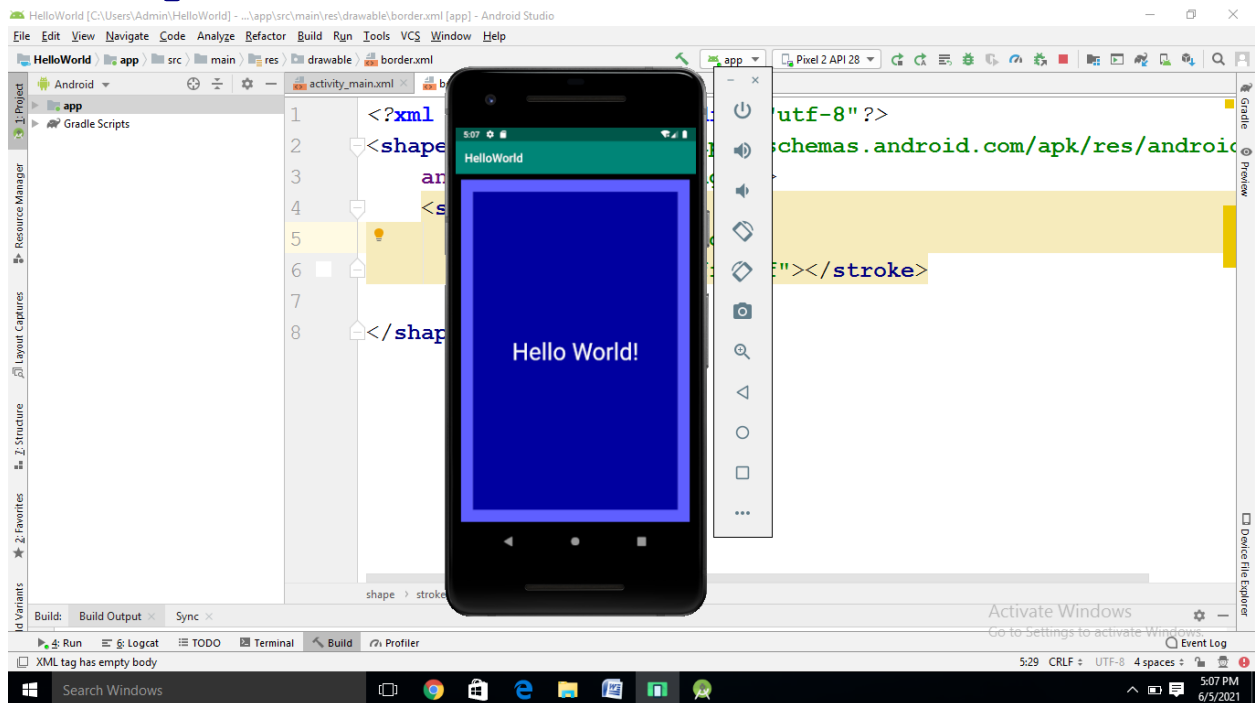

//Slip18_2

//activity_main.xml

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

```xml
    tools:context=".MainActivity"
    android:orientation="vertical">

<TextView
    android:layout_width="wrap_content"
    android:textStyle="bold"
    android:textSize="30dp"
    android:layout_height="wrap_content"
    android:layout_gravity="center_horizontal"

    android:id="@+id/textView1" />
<TextView
    android:layout_width="wrap_content"
    android:textStyle="bold"
    android:textSize="30dp"
    android:layout_height="wrap_content"
    android:layout_gravity="center_horizontal"

    android:id="@+id/textView2" />


<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="First no"
    android:id="@+id/editText1"
     />
<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Second no"

    android:id="@+id/editText2" />
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center_horizontal"

    android:text="power"
    android:id="@+id/button1"
    />
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center_horizontal"

    android:text="average"
```

```xml
            android:id="@+id/button2"
            />

</LinearLayout>
```

//MainActivity.java

```java
package com.example.slip18_2;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    TextView txt1,txt2;
    EditText edt1,edt2;
    Button btn1, btn2;
    int num1,num2;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        txt1 = (TextView) findViewById(R.id.textView1);
        txt2 = (TextView) findViewById(R.id.textView2);
        edt1 = (EditText) findViewById(R.id.editText1);
        edt2 = (EditText) findViewById(R.id.editText2);
        btn2 = (Button) findViewById(R.id.button2);
        btn1 = (Button) findViewById(R.id.button1);
        btn1.setOnClickListener(new View.OnClickListener(){
            @Override
            public void onClick(View v) {
                Intent intent1 = new
Intent(MainActivity.this,SecondActivity.class);
                int ans=1;
                num1 =
Integer.parseInt(txt1.getText().toString());
```

```java
                num2 =
Integer.parseInt(txt2.getText().toString());

                for(int i=1;i<num1;i++)
                    ans=ans*num2;

//intent1.putExtra("ans",edt2.getText().toString());
                startActivity(intent1);
                // startActivityForResult(intent1,1);
            }
        });
        btn2.setOnClickListener(new View.OnClickListener(){
            @Override
            public void onClick(View v) {
                Intent intent1 = new
Intent(MainActivity.this,SecondActivity.class);
                int avg;
                num1 =
Integer.parseInt(txt1.getText().toString());
                num2 =
Integer.parseInt(txt2.getText().toString());
                avg=num1+num2/2;


intent1.putExtra("ans",edt2.getText().toString());

intent1.putExtra("ang",edt2.getText().toString());
                startActivity(intent1);

                // startActivityForResult(intent1,1);
            }
        });


    }
}
```

//scond_activity.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:orientation="vertical"
```

```xml
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        tools:context=".SecondActivity">
    <TextView
            android:layout_width="wrap_content"
          android:layout_height="wrap_content"
           android:text="Second Screen"
           android:textSize="30dp"
           android:textStyle="bold"
          android:layout_gravity="center_horizontal"
           android:id="@+id/textView1" />
    <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text=""
            android:textSize="22dp"
            android:id="@+id/textView2"/>
</LinearLayout>
```

//SecondActivity.java

```java
package com.example.slip18_2;

import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class SecondActivity extends AppCompatActivity {
    TextView txt1,txt2;
    int n1,n2;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.second_activity);
        txt1=(TextView) findViewById(R.id.textView1);
        txt2 = (TextView) findViewById(R.id.textView2);
        Intent intent2 = getIntent();

        Bundle bundle = intent2.getExtras();
        int n1 = bundle.getInt("ans");
        int n2 = bundle.getInt("ang");
        txt2.setText(n1);
        txt2.setText(n2);
```

```
        }
}
```

Slip11_1
Create an application that will change color of screen and change the font size of text view using xml
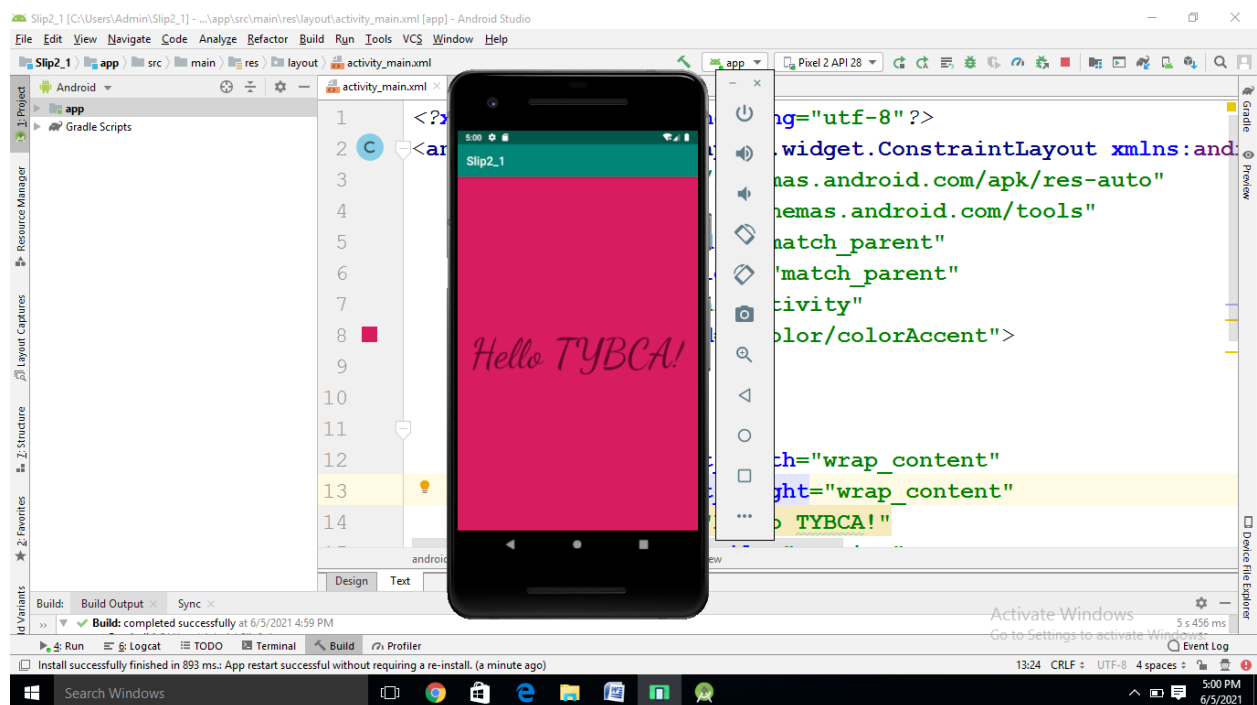

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity"
    android:background="@color/colorAccent">


    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```xml
        android:text="Hello TYBCA!"
        android:fontFamily="cursive"
        android:textSize="70dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"  />

</androidx.constraintlayout.widget.ConstraintLayout>
```

Slip8_2// Send EMail

//Activity_main.xml

```xml
<?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" >
```

```xml
<EditText
                android:id="@+id/editText1"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_alignParentRight="true"

android:layout_alignParentTop="true"

android:layout_marginRight="22dp"

android:layout_marginTop="16dp"
                android:ems="10"  >
</EditText>

        <EditText
                android:id="@+id/editText2"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_alignLeft="@+id/editText1"

android:layout_below="@+id/editText1"
            android:layout_marginTop="18dp"
                android:ems="10"  >
```

```xml
        <requestFocus />
    </EditText>

    <EditText
        android:id="@+id/editText3"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_alignLeft="@+id/editText2"

android:layout_below="@+id/editText2"

android:layout_marginTop="28dp"
        android:ems="10"

android:inputType="textMultiLine" />

    <TextView
        android:id="@+id/textView1"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_alignBaseline="@+id/editText1"

android:layout_alignBottom="@+id/editText
```

```
1"

android:layout_alignParentLeft="true"
            android:text="To:" />

        <TextView
            android:id="@+id/textView2"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_alignBaseline="@+id/editTe
xt2"

android:layout_alignBottom="@+id/editText
2"

android:layout_alignParentLeft="true"
            android:text="Subject:" />

        <TextView
            android:id="@+id/textView3"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_alignBaseline="@+id/editTe
xt3"
```

```xml
android:layout_alignBottom="@+id/editText
3"

android:layout_alignParentLeft="true"
        android:text="Message:" />
    <Button
        android:id="@+id/button1"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_alignLeft="@+id/editText3"

android:layout_below="@+id/editText3"

android:layout_marginLeft="76dp"

android:layout_marginTop="20dp"
        android:text="Send" />

</RelativeLayout>
```

//MainActivity.java

```java
package com.example.sendsms;

import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;

import android.os.Bundle;
import android.app.Activity;
import android.content.Intent;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;


public class MainActivity extends AppCompatActivity {

    EditText editTextTo, editTextSubject, editTextMessage;
    Button send;

    @Override
    protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);
```

```java
setContentView(R.layout.activity_main);

        editTextTo = (EditText)
findViewById(R.id.editText1);
        editTextSubject = (EditText)
findViewById(R.id.editText2);
        editTextMessage = (EditText)
findViewById(R.id.editText3);

        send = (Button)
findViewById(R.id.button1);

        send.setOnClickListener(new
OnClickListener() {

            @Override
            public void onClick(View
arg0) {
                String to =
editTextTo.getText().toString();
                String subject =
editTextSubject.getText().toString();
                String message =
editTextMessage.getText().toString();


                Intent email = new
Intent(Intent.ACTION_SEND);
```

```java
email.putExtra(Intent.EXTRA_EMAIL, new
String[]{to});

email.putExtra(Intent.EXTRA_SUBJECT,
subject);
                //need this to prompts
email client only

email.setType("message/rfc822");


startActivity(Intent.createChooser(email,
"Choose an Email client :"));


        }


    });
    }
}
```

```
package com.example.slipnew18_1;

import
androidx.appcompat.app.AppCompatActivity;

import android.content.DialogInterface;
import android.os.Bundle;
import android.app.Activity;
import android.app.AlertDialog;
import android.view.Menu;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;
```

```java
public class MainActivity extends
AppCompatActivity {
    Button closeButton;
    AlertDialog.Builder builder;
    @Override
    protected void onCreate(Bundle
savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);
        closeButton = (Button)
findViewById(R.id.button);
        builder = new
AlertDialog.Builder(this);

closeButton.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View v) {

                //Uncomment the below
code to Set the message and title from
the strings.xml file

builder.setMessage(R.string.dialog_messag
e) .setTitle(R.string.dialog_title);

                //Setting message
manually and performing action on button
```

```java
click
                    builder.setMessage("Do
you want to close this application ?")

.setCancelable(false)

.setPositiveButton("Yes", new
DialogInterface.OnClickListener() {
                            public void
onClick(DialogInterface dialog, int id) {
                                finish();

Toast.makeText(getApplicationContext(),"y
ou choose yes action for alertbox",

Toast.LENGTH_SHORT).show();
                        }
                    })

.setNegativeButton("No", new
DialogInterface.OnClickListener() {
                        public void
onClick(DialogInterface dialog, int id) {
                                //
Action for 'NO' Button

dialog.cancel();

Toast.makeText(getApplicationContext(),"y
ou choose no action for alertbox",
```

```java
Toast.LENGTH_SHORT).show();
                              }
                         });
                  //Creating dialog box
    AlertDialog alert = builder.create();
                  //Setting the title
manually

alert.setTitle("AlertDialogExample");
                  alert.show();
              }
         });
     }
}
```

//activity_main.xml

```xml
<?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/t
ools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
```

```xml
    tools:context=".MainActivity">

    <Button

android:layout_width="wrap_content"

android:layout_height="wrap_content"
        android:id="@+id/button"
        android:text="Close app"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintLeft_toLeftOf="parent"

app:layout_constraintRight_toRightOf="parent"

app:layout_constraintTop_toTopOf="parent"
/>   </RelativeLayout>
```
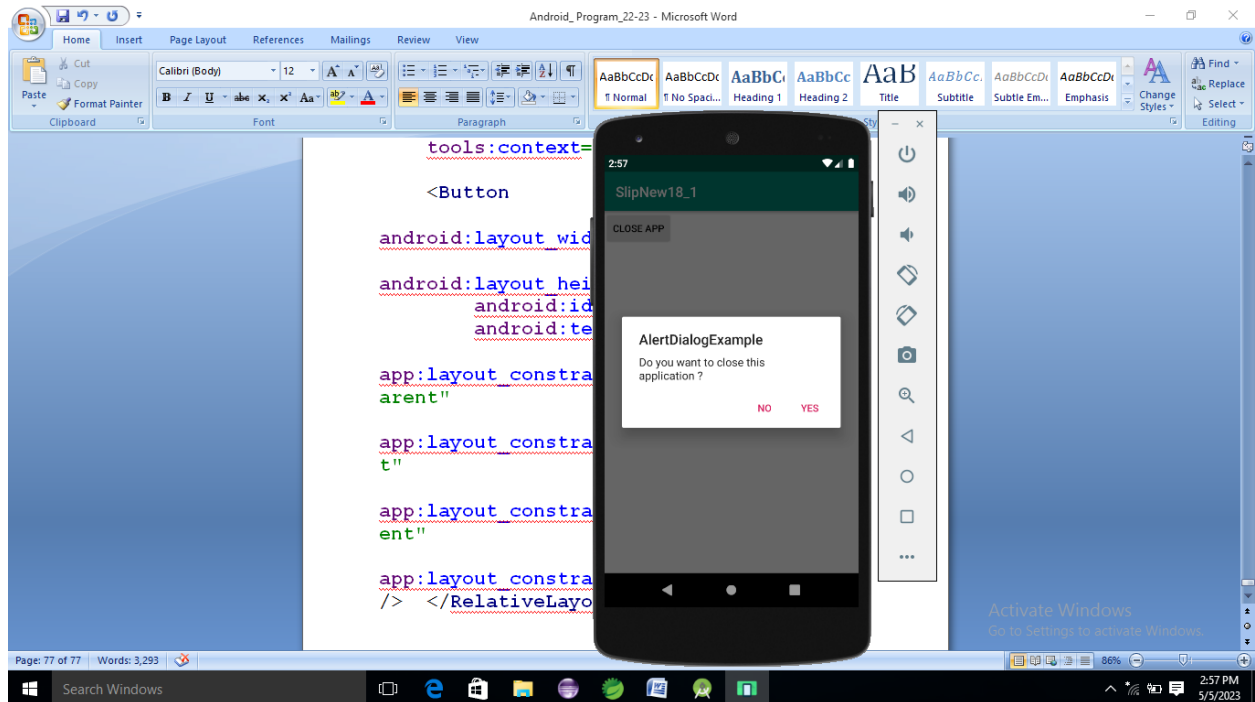
//string.xml

```xml
<resources>
    <string
name="app_name">SlipNew18_1</string>
    <string name="dialog_message">Welcome
to Alert Dialog</string>
```

```
    <string
name="dialog_title">Javatpoint Alert
Dialog</string>
</resources>
```


Slip20_1

```xml
<?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"
```

```xml
xmlns:tools="http://schemas.android.com/t
ools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <LinearLayout

android:layout_width="match_parent"

android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:paddingBottom="40px"
        android:weightSum="2" >

        <RadioGroup
            android:id="@+id/rg1"

android:layout_width="wrap_content"

android:layout_height="match_parent"
            android:layout_weight="1"

android:orientation="vertical" >

            <RadioButton

android:id="@+id/radioButton1"

android:layout_width="wrap_content"
```

```xml
    android:layout_height="wrap_content"

    android:layout_alignParentRight="true"

    android:layout_alignParentTop="true"

    android:layout_marginTop="20dp"
                android:text="Image1" />

        <RadioButton

    android:id="@+id/radioButton2"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:layout_alignBaseline="@+id/radioButton1"

    android:layout_alignBottom="@+id/radioButton1"

    android:layout_alignParentLeft="true"
                android:text="Image2" />
```

```xml
<RadioButton

android:id="@+id/radioButton3"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_marginTop="30dp"
                android:text="Image3" />


        </RadioGroup>
    </LinearLayout>

    <Button
        android:id="@+id/button1"

android:layout_width="wrap_content"

android:layout_heighbt="wrap_content"

android:layout_alignParentLeft="true"

android:layout_alignParentRight="true"

android:layout_centerVertical="true"
        android:text="Change Image" />

    <ImageView
```

```xml
            android:id="@+id/imageView1"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_alignLeft="@+id/button1"

android:layout_alignParentBottom="true"

android:layout_alignParentRight="true"

android:layout_below="@+id/button1"
            android:layout_marginTop="50dp"

android:src="@drawable/ic_launcher_backgr
ound" />

</RelativeLayout>
```

//Main_activity.java

```java
package com.example.slipnew20;

import
androidx.appcompat.app.AppCompatActivity;

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

```java
import android.widget.ImageView;
import android.widget.RadioGroup;

public class MainActivity extends
AppCompatActivity implements
RadioGroup.OnCheckedChangeListener {
    RadioGroup group1;
    Button gen;
    ImageView img;
    @Override
    protected void onCreate(Bundle
savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);
        group1 = (RadioGroup)
findViewById(R.id.rg1);

group1.setOnCheckedChangeListener((RadioG
roup.OnCheckedChangeListener) this);

    // group2 = (RadioGroup)
findViewById(R.id.rg2);
    //
group2.setOnCheckedChangeListener((RadioG
roup.OnCheckedChangeListener) this);

        img = (ImageView)
findViewById(R.id.imageView1);
```

```java
        // oncheckedChanged function
        gen = (Button)
findViewById(R.id.button1);
        gen.setOnClickListener(new
View.OnClickListener() {

            @Override
            public void onClick(View v) {
                // TODO Auto-generated
method stub


            }
        });

    }

    @Override
    public void
onCheckedChanged(RadioGroup group, int
checkedId) {
        // TODO Auto-generated method
stub
        switch (checkedId) {
            case R.id.radioButton1:

img.setImageResource(R.drawable.pic1);
                break;

            case R.id.radioButton2:
```

```java
img.setImageResource(R.drawable.pic2);
                break;

                case R.id.radioButton3:

img.setImageResource(R.drawable.pic3);
                break;
                default:
                break;
        }
    }
}
```
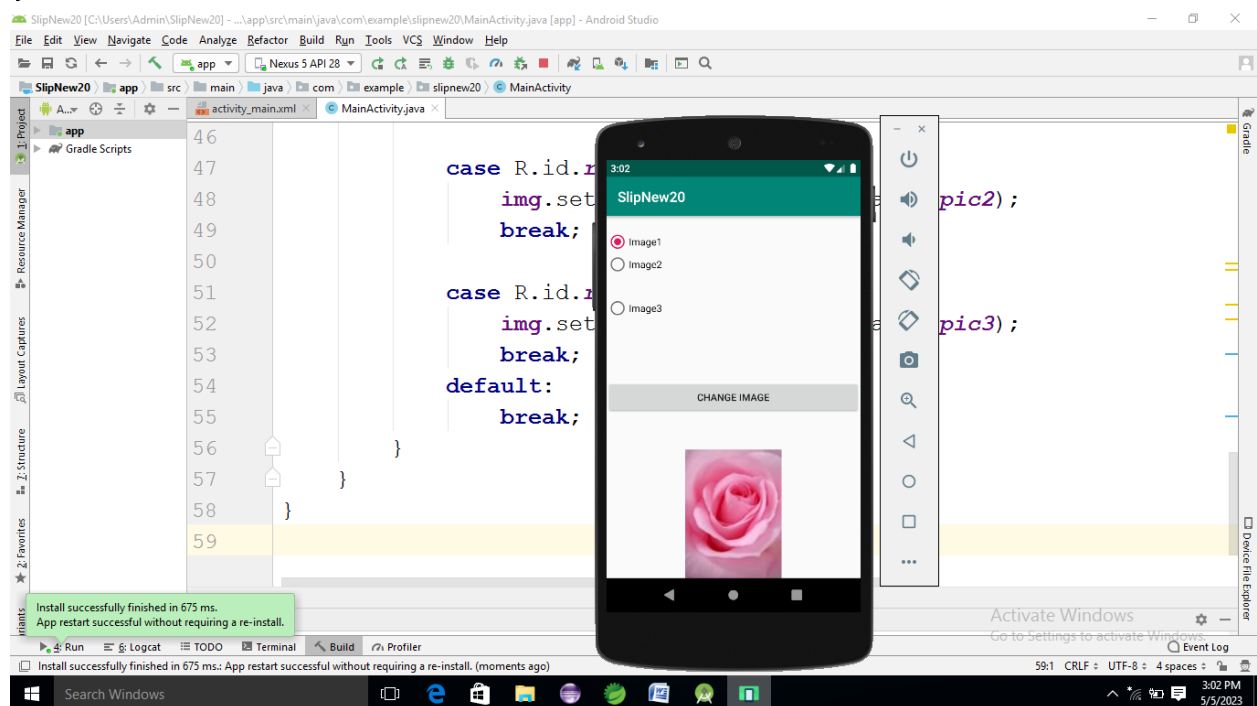

Slip1_2

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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"
    android:orientation="vertical"
    tools:context=".MainActivity">
    <ProgressBar
        android:id="@+id/progressBar2"


style="?android:attr/progressBarStyleHorizontal"

android:layout_width="wrap_content"

android:layout_height="wrap_content" />
</LinearLayout>
```

//Main_activity.java

```java
package com.example.myprogressbar;

import androidx.appcompat.app.AppCompatActivity;
```

```java
import android.os.Bundle;
import android.os.Handler;
import android.view.View;
import android.widget.ProgressBar;

public class MainActivity extends AppCompatActivity {
    static int progrss;
    ProgressBar pbar;
    int pstatus = 0;
    Handler handler = new Handler();

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        progrss = 0;
        pbar = (ProgressBar) findViewById(R.id.progressBar2);
        pbar.setMax(200);
        new Thread(new Runnable() {
            @Override
            public void run() {
                while (pstatus < 100) {
                    pstatus = doSomeWork();
                    handler.post(new Runnable() {
                        @Override
                        public void run() {
                            pbar.setProgress(pstatus);
                        }
                    });
                }
                handler.post(new Runnable() {
                    @Override
                    public void run() {
                        pbar.setVisibility(View.GONE);
                    }
                });
            }

            private int doSomeWork() {
                try {
                    Thread.sleep(500);
                } catch (InterruptedException e) {
                    e.printStackTrace();
                }
                return ++progrss;
```
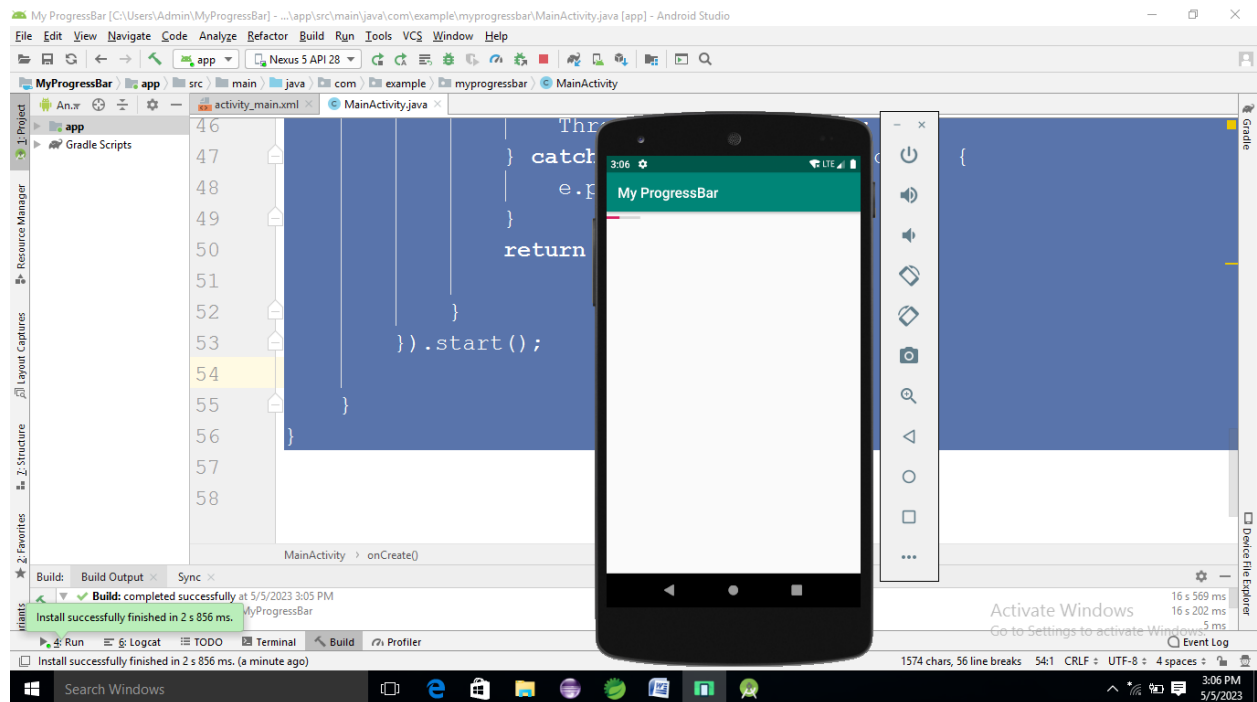
```
            }
        }).start();


    }
}
```


Slip19_2

package com.example.smsdemo;

import
androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.telephony.SmsManager;
import android.view.View;

```java
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends
AppCompatActivity {
    private EditText txtMobile;
    private EditText txtMessage;
    private Button btnSms;
    @Override
    protected void onCreate(Bundle
savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);
        txtMobile =
(EditText)findViewById(R.id.mblTxt);
        txtMessage =
(EditText)findViewById(R.id.msgTxt);
        btnSms =
(Button)findViewById(R.id.btnSend);
        btnSms.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View v) {
                sendSMS("5556", "hello");
            }
            private void sendSMS(String
s, String hello) {
```

```java
                try{
                        SmsManager smgr =
SmsManager.getDefault();

smgr.sendTextMessage(txtMobile.getText().
toString(),null,txtMessage.getText().toSt
ring(),null,null);
                        //
smgr.sendTextMessage("9860539978",null,tx
tMessage.getText().toString(),null,null);

Toast.makeText(MainActivity.this, "SMS
Sent Successfully",
Toast.LENGTH_SHORT).show();
                        }
                        catch (Exception e){

Toast.makeText(MainActivity.this, "SMS
Failed to Send, Please try again",
Toast.LENGTH_SHORT).show();
                        }
                }

                });
        }
}


//activity_main.xml
```

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com
/apk/res/android"

xmlns:app="http://schemas.android.com/apk
/res-auto"

xmlns:tools="http://schemas.android.com/t
ools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/fstTxt"

android:layout_width="wrap_content"

android:layout_height="wrap_content"
        android:layout_marginLeft="100dp"
        android:layout_marginTop="150dp"
        android:text="Mobile No" />
    <EditText
        android:id="@+id/mblTxt"

android:layout_width="wrap_content"

android:layout_height="wrap_content"
```

```xml
        android:layout_marginLeft="100dp"
        android:ems="10"/>

    <TextView
        android:id="@+id/secTxt"

android:layout_width="wrap_content"

android:layout_height="wrap_content"
        android:text="Message"
        android:layout_marginLeft="100dp"
/>
    <EditText
        android:id="@+id/msgTxt"

android:layout_width="wrap_content"

android:layout_height="wrap_content"
        android:layout_marginLeft="100dp"
        android:ems="10"  />
    <Button
        android:id="@+id/btnSend"

android:layout_width="wrap_content"

android:layout_height="wrap_content"
        android:layout_marginLeft="100dp"
        android:text="Send SMS"  />
</LinearLayout>
```
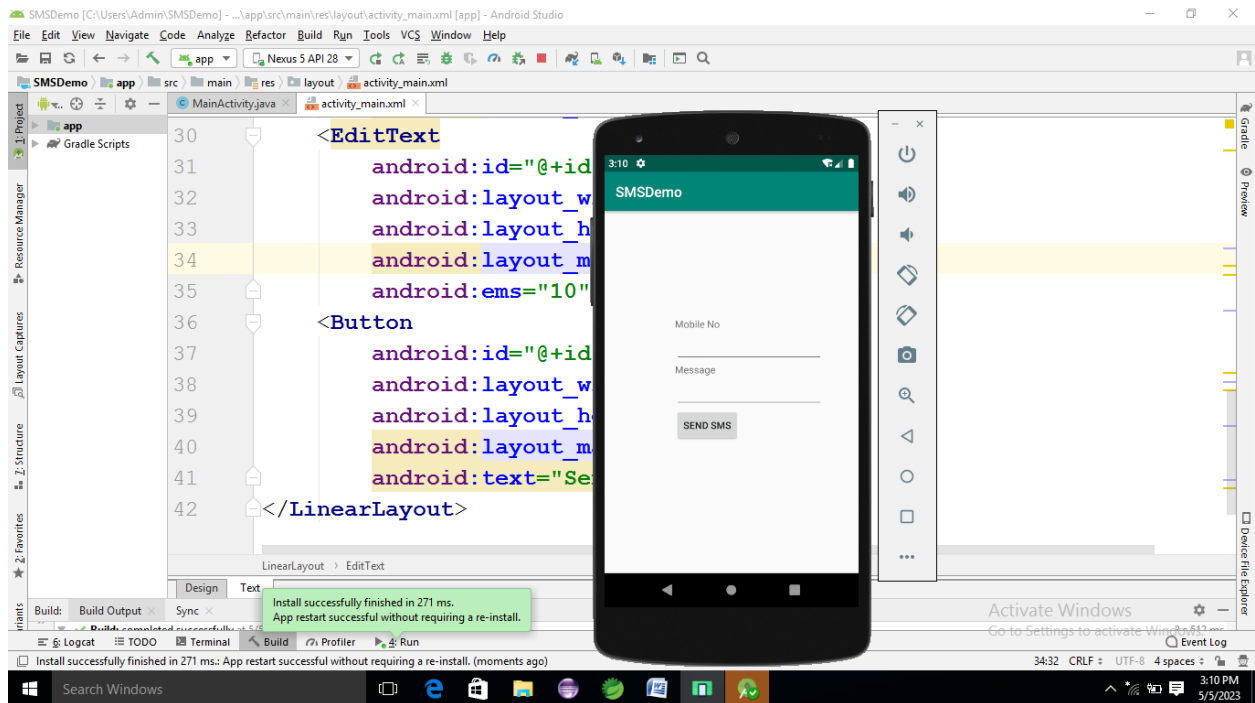
Slip2_2

```java
package com.example.slipnew2_2;

import androidx.appcompat.app.AppCompatActivity;

import android.media.AudioManager;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;

import java.io.IOException;

public class MainActivity extends AppCompatActivity {
    Button playBtn, pauseBtn;
    MediaPlayer mediaPlayer;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
```

```java
        // initializing our buttons
        playBtn = findViewById(R.id.idBtnPlay);
        pauseBtn = findViewById(R.id.idBtnPause);

        // setting on click listener for our play and pause
buttons.
        playBtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                // calling method to play audio.
                playAudio();
            }
        });

        pauseBtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                // checking the media player
                // if the audio is playing or not.

                if (mediaPlayer.isPlaying()) {
                    // pausing the media player if media player
                    // is playing we are calling below line to
                    // stop our media player.
                    mediaPlayer.stop();
                    mediaPlayer.reset();
                    mediaPlayer.release();

                    // below line is to display a message
                    // when media player is paused.
                    Toast.makeText(MainActivity.this, "Audio has
been paused", Toast.LENGTH_SHORT).show();
                } else {
                    // this method is called when media
                    // player is not playing.
                    Toast.makeText(MainActivity.this, "Audio has
not played", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }

    private void playAudio() {

        String audioUrl =
"https://www.soundhelix.com/examples/mp3/SoundHelix-Song-1.mp3";
```

```java
        // initializing media player
        MediaPlayer mediaPlayer = new MediaPlayer();

        // below line is use to set the audio
        // stream type for our media player.

mediaPlayer.setAudioStreamType(AudioManager.STREAM_MUSIC);

        // below line is use to set our
        // url to our media player.
        try {
            mediaPlayer.setDataSource(audioUrl);
            // below line is use to prepare
            // and start our media player.
            mediaPlayer.prepare();
            mediaPlayer.start();

        } catch (IOException e) {
            e.printStackTrace();
        }
        // below line is use to display a toast message.
        Toast.makeText(this, "Audio started playing..",
Toast.LENGTH_SHORT).show();
    }
}
```

//activity_main.xml

```xml
<?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">

    <Button
        android:id="@+id/idBtnPlay"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true"
        android:text="Play Audio file"
        android:textAllCaps="false" />
```

```xml
    <!--Button for pausing the audio-->
    <Button
        android:id="@+id/idBtnPause"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@id/idBtnPlay"
        android:layout_centerInParent="true"
        android:text="Pause Audio"
        android:textAllCaps="false" />
</RelativeLayout>
```

//manifest.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest
xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.slipnew2_2">
    <uses-permission android:name="android.permission.INTERNET"
/>
    <uses-permission
android:name="android.permission.ACCESS_NETWORK_STATE" />

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action
android:name="android.intent.action.MAIN" />

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

</manifest>
```
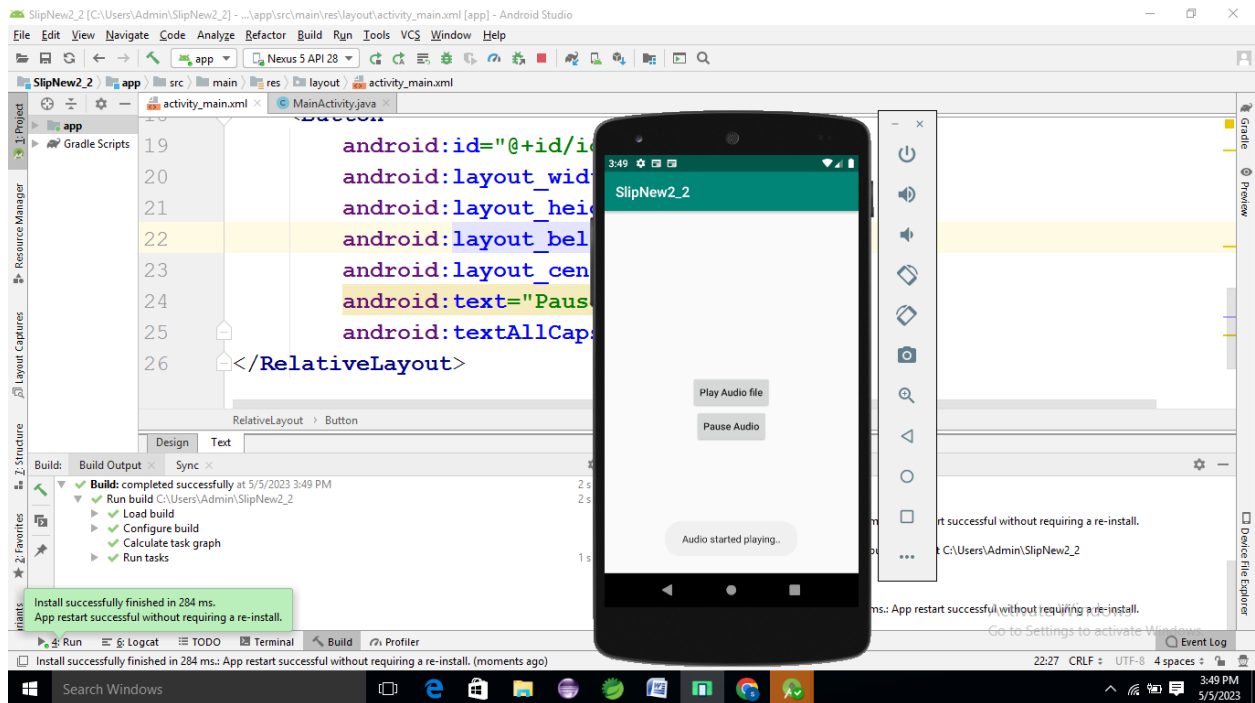
Slip17_1

Phone Dialer

//MainActivity.java

package com.example.intentdemo;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class MainActivity **extends** AppCompatActivity {
Button **b1**;

    @Override

```java
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1=(Button)findViewById(R.id.button1);


        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent i=new Intent(Intent.ACTION_DIAL,
Uri.parse("tel:+9860539978"));

                startActivity(i);

            }
        });
    }


    @Override
    public void onBackPressed() {
        super.onBackPressed();
        Intent i=new Intent(this,SecondActivity.class);
            startActivity(i);
    }
}
```

//activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
    <Button
```

```xml
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/button1"
        android:text="Contact"
        />

</LinearLayout>
```

//SecondActivity.java

```java
package com.example.intentdemo;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class SecondActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);
    }
}
```
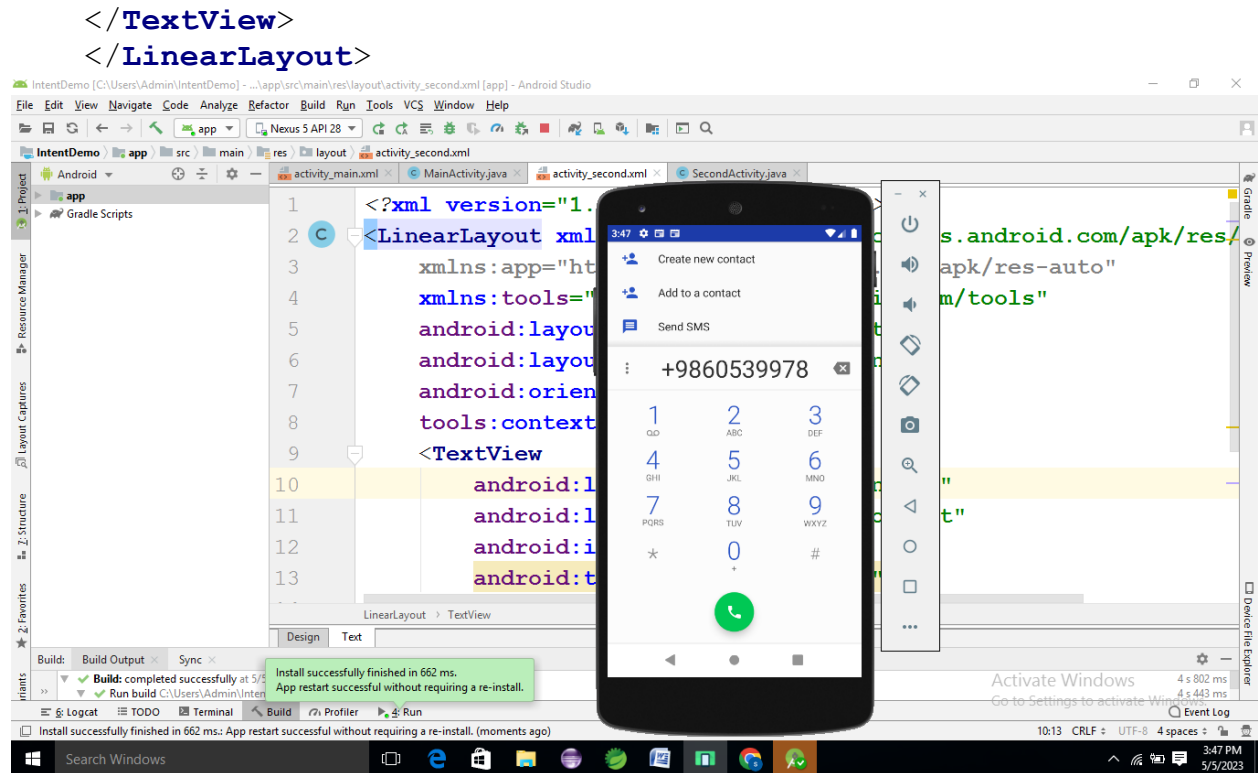
//activity_second.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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"
    android:orientation="vertical"
    tools:context=".SecondActivity">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/text1"
        android:text="Second Activity">
```

```
        </TextView>
      </LinearLayout>
```


Slip20_2

Main_activity.xml

```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">
<TextView
    android:id="@+id/textView"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
     />
</LinearLayout>
```

//MainActivity.java

```java
package com.example.listview;

import androidx.appcompat.app.AppCompatActivity;

import android.app.ListActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends ListActivity
{

        // Array of strings...
        //ListView simpleList;
        String countryList[] = {"India", "China",
"australia", "Portugle", "America", "NewZealand"};

@Override   public  void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        ListView lstview=getListView();
        lstview.setChoiceMode(ListView.CHOICE_MODE_MULTIPLE);
        lstview.setTextFilterEnabled(true);
        setListAdapter(new
ArrayAdapter<String>(this,android.R.layout.simple_list_item_1,co
untryList));

        }


    @Override
    public void onListItemClick(ListView l, View v, int
position, long id) {
        //super.onListItemClick(l, v, position, id);
        Toast.makeText(this,"you
select"+countryList[position],Toast.LENGTH_SHORT).show();
    }
}
```

Slip 18_2

MainActivity.java

```java
package com.example.notification;

import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.NotificationCompat;

import android.app.NotificationManager;
import android.app.PendingIntent;
import android.content.Context;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {
Button button;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        button = findViewById(R.id.button);
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                addNotification();
            }
        });
    }

    private void addNotification() {
        NotificationCompat.Builder builder =
                new NotificationCompat.Builder(this)

.setSmallIcon(R.drawable.ic_launcher_background) //set icon for
notification
                        .setContentTitle("Notifications
Example") //set title of notification
                        .setContentText("This is a notification
message")//this is notification message
                        .setAutoCancel(true) // makes auto
cancel of notification
```

```java
        .setPriority(NotificationCompat.PRIORITY_DEFAULT); //set
priority of notification


        Intent notificationIntent = new Intent(this,
NotificationView.class);

notificationIntent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TOP);
        //notification message will get at NotificationView
        notificationIntent.putExtra("message", "This is a
notification message");

        PendingIntent pendingIntent =
PendingIntent.getActivity(this, 0, notificationIntent,
                PendingIntent.FLAG_UPDATE_CURRENT);
        builder.setContentIntent(pendingIntent);

        // Add as notification
        NotificationManager manager = (NotificationManager)
getSystemService(Context.NOTIFICATION_SERVICE);
        manager.notify(0, builder.build());
    }
}
```

main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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"
    android:orientation="vertical"
    tools:context=".MainActivity">


    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="ANDROID NOTIFICATION"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
```

```xml
        app:layout_constraintVertical_bias="0.091"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Med
ium"/>

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/button"
        android:layout_marginBottom="112dp"
        android:layout_marginEnd="8dp"
        android:layout_marginStart="8dp"
        android:text="Notify"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent" />

</LinearLayout>
```

Activity_notification_view.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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"
    android:orientation="vertical"
    tools:context=".NotificationView">
    <TextView
        android:id="@+id/textView2"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:text="your detail of notification..."

android:textAppearance="@style/Base.TextAppearance.AppCompat.Med
ium" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="8dp"
```

```xml
        android:layout_marginEnd="8dp"
        android:layout_marginStart="8dp"
        android:layout_marginTop="8dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.096"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView2"
        app:layout_constraintVertical_bias="0.206"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"/>


</LinearLayout>
```
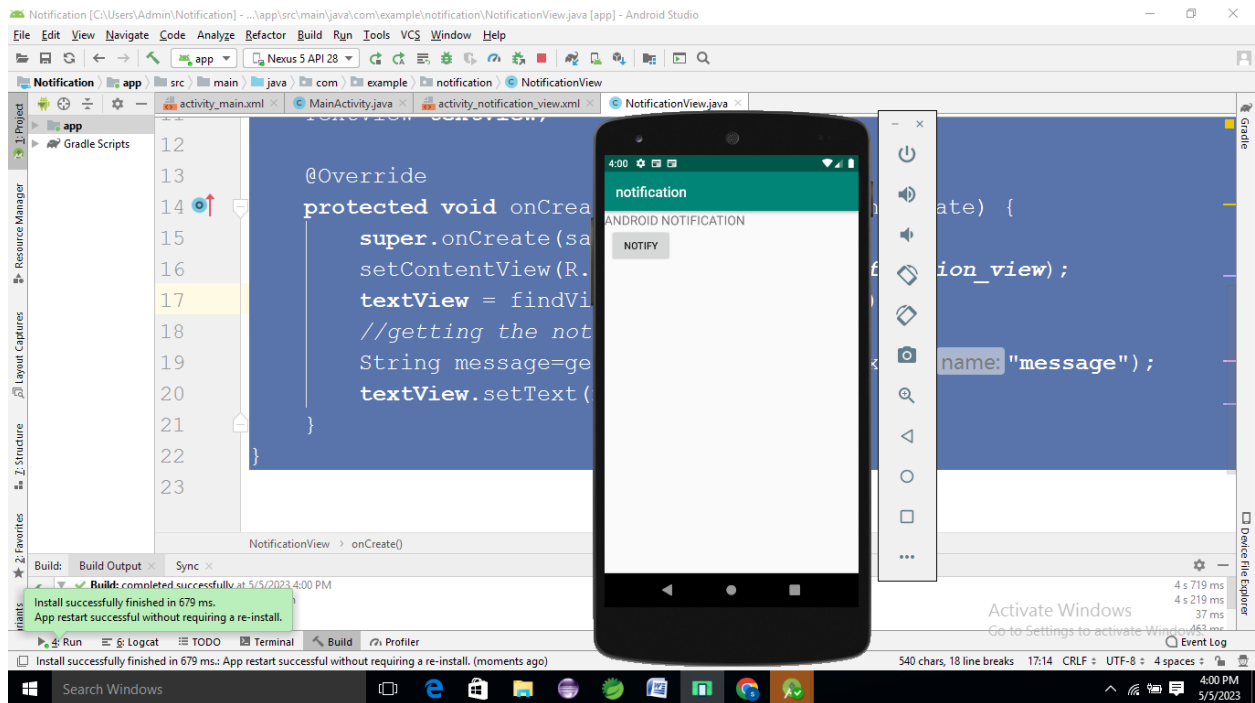
//NotificationView.java

```java
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;

public class NotificationView extends AppCompatActivity {

    TextView textView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_notification_view);
        textView = findViewById(R.id.textView);
        //getting the notification message
        String message=getIntent().getStringExtra("message");
        textView.setText(message);
    }
}
```

//Google Map Zoom in ,Zoom-out Program

//MapsActivity.java

```java
package com.example.mygps;

import androidx.fragment.app.FragmentActivity;

import android.os.Bundle;
import android.view.KeyEvent;

import com.google.android.gms.maps.CameraUpdateFactory;
import com.google.android.gms.maps.GoogleMap;
import com.google.android.gms.maps.OnMapReadyCallback;
import com.google.android.gms.maps.SupportMapFragment;
import com.google.android.gms.maps.model.LatLng;
import com.google.android.gms.maps.model.MarkerOptions;
```

```java
public class MapsActivity<onMapReady> extends
FragmentActivity implements OnMapReadyCallback {

    private GoogleMap mMap;

    @Override
    protected void onCreate(Bundle savedInstanceState)
{
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_maps);
        // Obtain the SupportMapFragment and get
notified when the map is ready to be used.
        SupportMapFragment mapFragment =
(SupportMapFragment) getSupportFragmentManager()
                .findFragmentById(R.id.map);
        mapFragment.getMapAsync(this);
    }




    /**
     * Manipulates the map once available.
     * This callback is triggered when the map is ready
to be used.
     * This is where we can add markers or lines, add
listeners or move the camera. In this case,
     * we just add a marker near Sydney, Australia.
     * If Google Play services is not installed on the
device, the user will be prompted to install
     * it inside the SupportMapFragment. This method
will only be triggered once the user has
     * installed Google Play services and returned to
the app.
     */
    @Override
    public void onMapReady(GoogleMap googleMap) {
        mMap = googleMap;
```

```java
        // Add a marker in Sydney and move the camera
        LatLng sydney = new LatLng(21, 78);
        mMap.addMarker(new
MarkerOptions().position(sydney).title("Marker in
Sydney"));

mMap.moveCamera(CameraUpdateFactory.newLatLng(sydney));
    }


    @Override
    public boolean onKeyDown(int keyCode, KeyEvent
event) {
        switch (keyCode)
        { case
KeyEvent.KEYCODE_3:mMap.animateCamera(CameraUpdateFacto
ry.zoomIn());
        break;
            case KeyEvent.KEYCODE_1
:mMap.animateCamera(CameraUpdateFactory.zoomOut());
        break;}

        return super.onKeyDown(keyCode, event);
    }


}
```
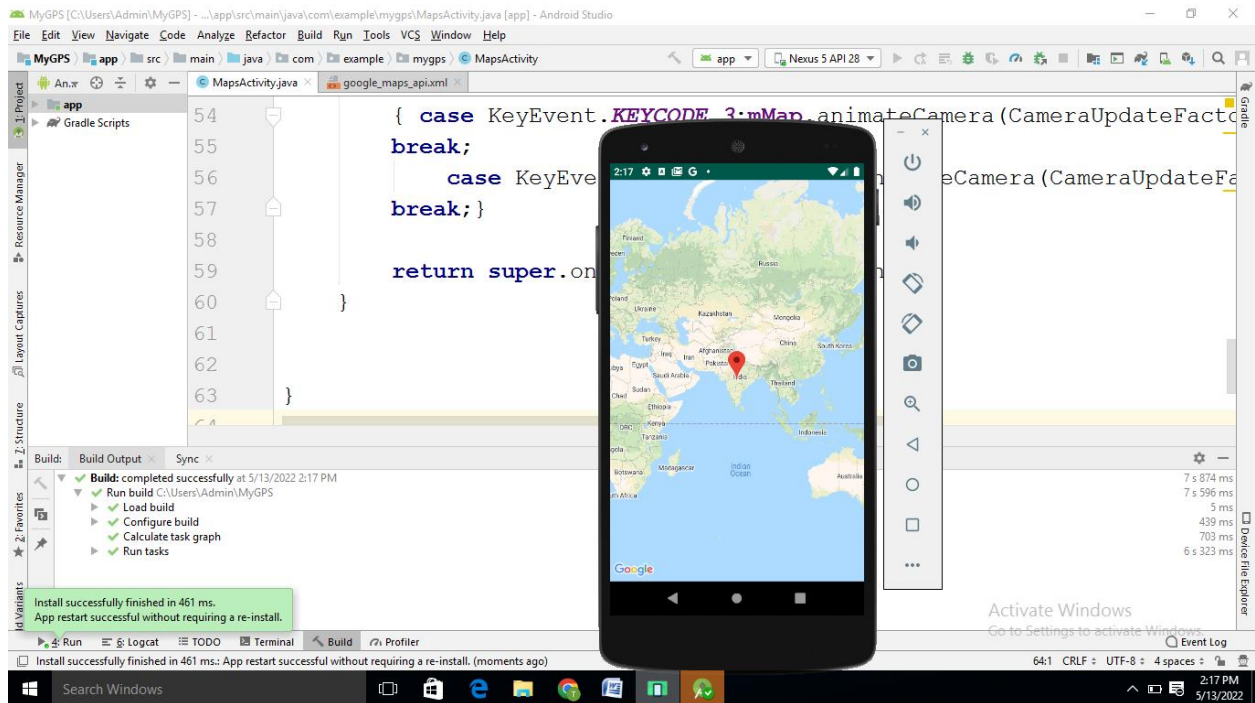
// Send EMail

//Activity_main.xml

```xml
<?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/t
ools"
```

```xml
    android:layout_width="match_parent"

    android:layout_height="match_parent"
        tools:context=".MainActivity" >



<EditText
                android:id="@+id/editText1"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:layout_alignParentRight="true"

    android:layout_alignParentTop="true"

    android:layout_marginRight="22dp"

    android:layout_marginTop="16dp"
                android:ems="10" >
</EditText>

        <EditText
                android:id="@+id/editText2"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"
```

```xml
        android:layout_alignLeft="@+id/editText1"

        android:layout_below="@+id/editText1"
                android:layout_marginTop="18dp"
                    android:ems="10"  >

                    <requestFocus />
            </EditText>

            <EditText
                    android:id="@+id/editText3"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_alignLeft="@+id/editText2"

        android:layout_below="@+id/editText2"

        android:layout_marginTop="28dp"
                    android:ems="10"

        android:inputType="textMultiLine" />

            <TextView
                    android:id="@+id/textView1"

        android:layout_width="wrap_content"
```

```xml
        android:layout_height="wrap_content"

        android:layout_alignBaseline="@+id/editTe
xt1"

        android:layout_alignBottom="@+id/editText
1"

        android:layout_alignParentLeft="true"
                android:text="To:" />

        <TextView
                android:id="@+id/textView2"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_alignBaseline="@+id/editTe
xt2"

        android:layout_alignBottom="@+id/editText
2"

        android:layout_alignParentLeft="true"
                android:text="Subject:" />

        <TextView
                android:id="@+id/textView3"
```

```xml
        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_alignBaseline="@+id/editTe
xt3"

        android:layout_alignBottom="@+id/editText
3"

        android:layout_alignParentLeft="true"
                android:text="Message:" />
        <Button
                android:id="@+id/button1"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_alignLeft="@+id/editText3"

        android:layout_below="@+id/editText3"

        android:layout_marginLeft="76dp"

        android:layout_marginTop="20dp"
                android:text="Send" />

    </RelativeLayout>
```

//MainActivity.java

```java
package com.example.sendsms;

import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;

import android.os.Bundle;
import android.app.Activity;
import android.content.Intent;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;


public class MainActivity extends AppCompatActivity {

    EditText editTextTo, editTextSubject, editTextMessage;
    Button send;
```

```java
    @Override
    protected void onCreate(Bundle
savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);

        editTextTo = (EditText)
findViewById(R.id.editText1);
        editTextSubject = (EditText)
findViewById(R.id.editText2);
        editTextMessage = (EditText)
findViewById(R.id.editText3);

        send = (Button)
findViewById(R.id.button1);

        send.setOnClickListener(new
OnClickListener() {

            @Override
            public void onClick(View
arg0) {
                String to =
editTextTo.getText().toString();
                String subject =
editTextSubject.getText().toString();
                String message =
```

```
editTextMessage.getText().toString();


                Intent email = new
Intent(Intent.ACTION_SEND);

email.putExtra(Intent.EXTRA_EMAIL, new
String[]{to});

email.putExtra(Intent.EXTRA_SUBJECT,
subject);
                //need this to prompts
email client only

email.setType("message/rfc822");


startActivity(Intent.createChooser(email,
"Choose an Email client :"));

            }

        });
    }
}
```