LP1-ACTIVITY LIFE CYCLE

Main activity

```java
package com.example.exptt3;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Toast.makeText(getApplicationContext(),"AppCreate function",Toast.LENGTH_SHORT).show();
    }
    @Override
    protected void onStart() {
        super.onStart();
        Toast.makeText(getApplicationContext(),"AppStart function",Toast.LENGTH_SHORT).show();
    }

    @Override
    protected void onResume() {
        super.onResume();
        Toast.makeText(getApplicationContext(),"AppResume function",Toast.LENGTH_SHORT).show();
    }

    @Override
    protected void onPause() {
        super.onPause();
        Toast.makeText(getApplicationContext(),"AppPause function",Toast.LENGTH_SHORT).show();
    }

    @Override
```

```java
    protected void onStop() {
super.onStop();
    Toast.makeText(getApplicationContext(),"AppStop
function",Toast.LENGTH_SHORT).show();
    }

  @Override
    protected void onRestart() {
super.onRestart();
    Toast.makeText(getApplicationContext(),"AppRestart
function",Toast.LENGTH_SHORT).show();
    }
  @Override
    protected void onDestroy() {
super.onDestroy();
    Toast.makeText(getApplicationContext(),"AppDestroy
function",Toast.LENGTH_SHORT).show();
    }
}
```

Activity.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/a
ndroid"
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="#99ddff">

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

```xml
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/ed"
        android:layout_width="wrap_content"
android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPersonName"
android:text="PRIYANKA"
        app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView"
        />

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

Implicit-intent:

main activity.java

package com.example.implicitin; 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; import

android.widget.EditText; public class MainActivity extends

AppCompatActivity {

EditText phoneNumberToCall;
Button call;
@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main); call = findViewById(R.id.call);

```java
phoneNumberToCall = findViewById(R.id.myphone);

call.setOnClickListener(new View.OnClickListener() {

@Override public void onClick(View v) {

Uri myUri = Uri.parse("tel:" + phoneNumberToCall.getText().toString()); Intent it = new

Intent(Intent.ACTION_DIAL, myUri); startActivity(it);

}
});
}
}
```

Activitymain.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">

<EditText android:layout_width="match_parent"

android:layout_height="wrap_content"

android:id="@+id/myphone" android:hint="Enter the Phone

Number" android:layout_margin="20dp"

/>
<Button android:layout_width="match_parent"

android:layout_height="wrap_content"


android:id="@+id/call" android:text="CALL"

android:layout_margin="20dp"/>


</LinearLayout>
```

Explicit-intent:

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">

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

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:hint="ENTER YOUR NAME" /> <Button

android:id="@+id/click"

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:text="click" />

</LinearLayout>
```

```java
package com.example.expl; 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 {

EditText name;
Button click; @Override protected void onCreate(Bundle

savedInstanceState) { super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main); name= findViewById(R.id.name);

click= findViewById(R.id.click); click.setOnClickListener(new

View.OnClickListener() {
```

```java
@Override public void onClick(View view) { Intent

it = new Intent(MainActivity.this,

MainActivity2.class);

Bundle b = new Bundle() ;
b.putString("name",name.getText().toString()); it.putExtras(b) ;

startActivity(it);

}
});
}
}
```

```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=".MainActivity2">

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


android:layout_width="match_parent"

android:layout_height="wrap_content" android:text="NAME COMES HERE"

android:textSize="40dp" android:textAlignment="center"

/>
</LinearLayout>
```

Mainactivity.java

```java
package com.example.expl; import

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

import android.widget.TextView; public class MainActivity2 extends

AppCompatActivity {

TextView myName;
String nameFromFirstActivity="";
@Override protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState); setContentView(R.layout.activity_main2);

myName = findViewById(R.id.mytext); nameFromFirstActivity =

getIntent().getStringExtra("name"); myName.setText(nameFromFirstActivity);

}
```

Basic calculator:

Activity.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:layout_margin="20dp"
Android:background="#74a192"
Android:orientation="vertical"
Tools:context=".MainActivity">
<TextView
Android:id="@+id/textView"
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:gravity="center"
Android:layout_marginTop="100dp"
Android:text="CALCULATOR"
Android:textSize="53dp"
/>
<EditText
Android:id="@+id/res"
Android:layout_width="match_parent" Android:layout_height="wrap_content"
Android:ems="10"
Android:text="0"
Android:gravity="right"
Android:textSize="40dp"
```

```xml
/>
<LinearLayout
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:orientation="horizontal">
<Button
Android:layout_width="match_parent"
Android:layout_height="100dp"
Android:id="@+id/nine"
Android:text="9" Android:textSize="25dp"
Android:layout_weight="1"
/>
<Button
Android:layout_width="match_parent"
Android:layout_height="100dp"
Android:id="@+id/eight"
Android:text="8"
Android:textSize="25dp"
Android:layout_weight="1"
/>
<Button
Android:layout_width="match_parent"
Android:layout_height="100dp"
Android:id="@+id/seven" Android:text="7"
Android:textSize="25dp"
Android:layout_weight="1"
/>
<Button
Android:layout_width="match_parent"
Android:layout_height="100dp"
Android:id="@+id/plus"
Android:text="+"
Android:textSize="25dp"
Android:layout_weight="1"
/>
```

```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:background="@drawable/c1"
Android:orientation="vertical"
Android:layout_margin="20dp"
Tools:context=".MainActivity">

<TextView
Android:id="@+id/textView2"
Android:layout_marginTop="100dp"
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:text="CALCULATOR" Android:textColor="#f2f2f2"
Android:textSize="40dp"
Android:gravity="center"
Android:backgroundTint="#6666ff"
/>
<EditText
Android:id="@+id/res"
Android:layout_marginTop="20dp"
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:ems="10"
Android:textColor="#ffffff"
Android:text="0"
Android:textSize="40dp"
Android:gravity="right" Android:backgroundTint="#000000"
/>
<LinearLayout
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:orientation="horizontal">
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/nine"

```xml
Android:text="9"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#000000"/>
<Button Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/eight"
Android:text="8"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#0000
00"/> <Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/seven"
Android:text="7"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#000000 "/>


<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/plus"
Android:text="+"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#cc5200"/>
</LinearLayout>
<LinearLayout
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:orientation="horizontal"> <Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/six"
Android:text="6"
Android:textSize="25dp"
Android:layout_weight="1"
```

```
Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/five"
Android:text="5"
Android:textSize="25dp" Android:layout_weight="1"
Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/four"
Android:text="4"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp" Android:id="@+id/minus"
Android:text="-"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#cc5200"/>



</LinearLayout>
<LinearLayout
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:orientation="horizontal">
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/three" Android:text="3"
Android:textSize="25dp"
Android:layout_weight="1"
```

```
Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/two"
Android:text="2"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/one"
Android:text="1"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/into"
Android:text="*"
Android:textSize="25dp" Android:layout_weight="1"
Android:backgroundTint="#cc5200"/>


</LinearLayout>
<LinearLayout
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:orientation="horizontal">
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/zero"
Android:text="0"
Android:textSize="25dp"
```

```xml
Android:layout_weight="1" Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/mod"
Android:text="%"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/dot" Android:text="."
Android:textSize="25dp"



Android:layout_weight="1"
Android:backgroundTint="#000000
"/>
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/devide"
Android:text="/"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#cc5200
"/>



</LinearLayout>
<LinearLayout
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:orientation="horizontal">
<Button
Android:layout_width="match_parent"
```

```
Android:layout_height="50dp"
Android:id="@+id/equals"
Android:text="="
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#cc5200"/> </LinearLayout>
<LinearLayout
Android:layout_width="match_parent"
Android:layout_height="wrap_content"
Android:orientation="horizontal">
<Button
Android:layout_width="match_parent"
Android:layout_height="50dp"
Android:id="@+id/CLEAR"
Android:text="CLEAR"
Android:textSize="25dp"
Android:layout_weight="1"
Android:backgroundTint="#cc5200"/>
</LinearLayout>
</LinearLayout>
```

Main activity.xml

```
Package com.example.exp_2p;
Import androidx.appcompat.app.AppCompatActivity;
Import android.os.Bundle;
Import android.view.View;
Import android.widget.Button;
Import android.widget.EditText;
Public class MainActivity extends AppCompatActivity implements
View.OnClickListener {
Button
nine,eight,seven,six,five,four,three,two,one,zero,dot,plus,minus,into,devide,mod,e
quals,CLEAR;
```

```java
EditText res;
String operatorPressed="";
@Override
Protected void onCreate(Bundle savedInstanceState) {
Super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
res=findViewById(R.id.res);
nine=findViewById(R.id.nine);
eight=findViewById(R.id.eight);
seven=findViewById(R.id.seven);
six=findViewById(R.id.six);
five=findViewById(R.id.five);
four=findViewById(R.id.four);
three=findViewById(R.id.three);
two=findViewById(R.id.two);
one=findViewById(R.id.one);
zero=findViewById(R.id.zero);
plus=findViewById(R.id.plus); minus=findViewById(R.id.minus);
into=findViewById(R.id.into);
devide=findViewById(R.id.devide);
mod=findViewById(R.id.mod);
dot=findViewById(R.id.dot);
equals=findViewById(R.id.equals);
CLEAR=findViewById(R.id.CLEAR);
Nine.setOnClickListener(this);
Eight.setOnClickListener(this);
Seven.setOnClickListener(this);
Six.setOnClickListener(this);
Five.setOnClickListener(this);
Four.setOnClickListener(this);
Three.setOnClickListener(this);
Two.setOnClickListener(this); One.setOnClickListener(this);
Zero.setOnClickListener(this);
Plus.setOnClickListener(this);
Minus.setOnClickListener(this);
Into.setOnClickListener(this);
Devide.setOnClickListener(this);
Mod.setOnClickListener(this);
Dot.setOnClickListener(this);
Equals.setOnClickListener(this);
```

```java
CLEAR.setOnClickListener(this);
}
@Override
Public void onClick(View view) {
Switch (view.getId()){
Case R.id.nine:res.append("9");break; Case R.id.eight:res.append("8");break;
Case R.id.seven:res.append("7");break;
Case R.id.six:res.append("6");break;
Case R.id.five:res.append("5");break;
Case R.id.four:res.append("4");break;
Case R.id.three:res.append("3");break;
Case R.id.two:res.append("2");break;
Case R.id.one:res.append("1");break;
Case R.id.zero:res.append("0");break;
Case R.id.plus:res.append("+");operatorPressed="+";break;
Case R.id.minus:res.append("-");operatorPressed="-";break;
Case R.id.into:res.append("*");operatorPressed="*";break;
Case R.id.devide:res.append("/");operatorPressed="/";break;
Case R.id.mod:res.append("%");operatorPressed="+";break;
Case R.id.CLEAR:res.setText("");break;
Case R.id.equals:
Double finalres=compute(res.getText().toString(),operatorPressed);
Res.setText(String.valueOf(finalres));



}
}
Private double compute(String toString, String operatorPressed) {
String mArray[]=toString.split("\\+|-|\\*|\\/|\\%");
Double
op1=Double.parseDouble((mArray[0]));
Double
op2=Double.parseDouble((mArray[1]));
Switch(operatorPressed){
Case "+":return op1+op2;
Case "-":return op1-op2;
Case "*":return op1*op2;
Case "/":return op1/op2;
Case "%":return op1%op2;
}
```

Return 0.0;
}
}

SQLITE

Mainactivity.java

package com.example.sqlite; import

androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity extends AppCompatActivity {
    Button register,update,delete,display, login;
    EditText uname, upass;
TextView res;
    private static final String *dbName*="studentdb"; *// Database Name*
private static final String *tbName*="student" ; *// Table Name*   private
static final int *dbVersion* = 1 ;
    DbHelper myDbHelper ;   @Override   protected void
onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.*activity_main*);

    setContentView(R.layout.*activity_main*);
register=findViewById(R.id.*register*);

```java
update = findViewById(R.id.update);
delete = findViewById(R.id.delete) ;
display = findViewById(R.id.display) ;
login = findViewById(R.id.login) ;        res =
findViewById(R.id.res) ;        uname =
findViewById(R.id.uname) ;        upass =
findViewById(R.id.upass) ;
register.setOnClickListener(new
View.OnClickListener() {
        @Override        public void onClick(View view) {            myDbHelper = new
DbHelper(MainActivity.this,dbName, null, dbVersion);            long val =
myDbHelper.adduser(uname.getText().toString(), upass.getText().toString());            if(val
== -1){
            Toast.makeText(MainActivity.this, "Error", Toast.LENGTH_SHORT).show();
          }else{
            Toast.makeText(MainActivity.this, "inserted", Toast.LENGTH_SHORT).show();
          }
        }

    });

    update.setOnClickListener(new View.OnClickListener() {
        @Override        public void onClick(View view) {            myDbHelper = new
DbHelper(MainActivity.this,dbName, null, dbVersion);
myDbHelper.update(uname.getText().toString(),upass.getText().toString());
        }

    });
    delete.setOnClickListener(new View.OnClickListener() {
        @Override        public void onClick(View view) {            myDbHelper = new
DbHelper(MainActivity.this,dbName, null, dbVersion);
myDbHelper.delete(uname.getText().toString());
        }
    });
    display.setOnClickListener(new View.OnClickListener() {
        @Override        public void
onClick(View view) {
            myDbHelper = new DbHelper(MainActivity.this,dbName, null, dbVersion);
String value = myDbHelper.display(MainActivity.this);            res.setText(value);
        }
    });

  }
}
```

DbHelper.java

```java
package com.example.sqlite;

import android.content.ContentValues; import
android.content.Context; import
android.database.Cursor; import
android.database.sqlite.SQLiteDatabase; import
android.database.sqlite.SQLiteOpenHelper; import
androidx.annotation.Nullable;

public class DbHelper extends SQLiteOpenHelper {
    private static final String dbName = "studentdb"; // Database Name
private static final String tbName = "student"; // Table Name    private
static final int dbVersion = 1;

    public DbHelper(@Nullable Context context, @Nullable String name, @Nullable
SQLiteDatabase.CursorFactory factory, int version) {        super(context, name, factory,
version);
    }

    @Override    public void
onCreate(SQLiteDatabase db) {
        db.execSQL("CREATE TABLE " + tbName + "(uname VARCHAR(10),passw VARCHAR(10))" + ";");

    }

    @Override    public void onUpgrade(SQLiteDatabase db, int prev_v, int
new_v) {        db.execSQL("DROP TABLE IF EXISTS " + tbName);
onCreate(db);
    }

    public long adduser(String name, String pass) {
        SQLiteDatabase sqLiteDatabase = this.getWritableDatabase();
ContentValues cv = new ContentValues();        cv.put("uname", name);
cv.put("passw ", pass);        long result =
sqLiteDatabase.insert(tbName, null, cv);        sqLiteDatabase.close();
return result;
    }

    public void delete(String name) {
        SQLiteDatabase sqLiteDatabase = this.getWritableDatabase(); // 7(a)
sqLiteDatabase.execSQL("DELETE FROM " + tbName + " WHERE uname='" + name
+
"
'
;
"
```

```
)
;
/
/
7
(
b
)
// SQL statement : DELETE FROM tbName WHERE uname='name';        sqLiteDatabase.close(); //
7(c)
   }
   public void update(String name, String pass) {
      SQLiteDatabase sqLiteDatabase = this.getWritableDatabase(); //6(a)
sqLiteDatabase.execSQL("UPDATE " + tbName + " SET passw='" + pass + "'" + "
WHERE uname='" + name + "';");//6(b)
// UPDATE tbName SET passw='pass' WHERE uname='name' ; SQL statement
sqLiteDatabase.close(); // 6(c)
   }

   public String display(Context ctx) {
      SQLiteDatabase sqLiteDatabase = this.getReadableDatabase(); //8(a)
      Cursor cursor = sqLiteDatabase.rawQuery("SELECT * FROM " + tbName, null); //8(b)
      String finalres = " ";       while (cursor.moveToNext()) { //8(c)
finalres += cursor.getString(0) + ":" + cursor.getString(1); // 8(d)
   }
return
finalres;
   }
}
```

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">
```

```xml
<EditText
    android:id="@+id/uname"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:text="Name" />

<EditText        android:id="@+id/upass"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:text="Name" />

<Button        android:id="@+id/login"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Button" />

<Button
    android:id="@+id/register"
    android:layout_width="match_pare
nt"
    android:layout_height="wrap_cont
ent"        android:text="Button" />
```

```xml
<Button        android:id="@+id/delete"

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:text="Button" />


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

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:text="Button" />


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

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:text="Button" />


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

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:text="TextView" />
```

MEDIAPLAYER:

Activitymain.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"
```

```xml
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#80b3ff"    tools:context=".MainActivity"
    android:orientation="vertical">

    <TextView
        android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="@string/songname"
    android:id="@+id/songname"
    android:layout_margin="30dp"
    android:fontFamily="cursive"
    android:textSize="40dp"
    android:gravity="center"
    android:textStyle="bold"
        />
    <Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
        android:text="Play"
    android:id="@+id/play"
    android:layout_marginLeft="30dp"
    android:layout_marginRight="30dp"
    android:backgroundTint="#ff99ff"/>

    <Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Pause"
    android:id="@+id/pause"
    android:layout_marginLeft="30dp"
    android:layout_marginRight="30dp"
    android:backgroundTint="#ff99ff"/>

    <Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
        android:text="forward"
    android:id="@+id/forward"
    android:layout_marginLeft="30dp"
    android:layout_marginRight="30dp"
    android:backgroundTint="#ff99ff"/>
```

```xml
    <Button
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:text="Backward"
android:id="@+id/rewind"
android:layout_marginLeft="30dp"
android:backgroundTint="#ff99ff"
android:layout_marginRight="30dp" />
<Button
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:backgroundTint="#ff99ff"
android:text="stop"
android:id="@+id/stop"
android:layout_marginLeft="30dp"
android:layout_marginRight="30dp" />

</LinearLayout>
```

Mainactivity.java

```java
package com.example.mp; import

androidx.appcompat.app.AppCompatActivity;

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


public class MainActivity extends AppCompatActivity
{
   Button play,pause,stop,backward,forward;
   MediaPlayer
mediaPlayer;
```

```java
int fwTime = 5000;
 int rwTime = 5000;
int startTime=0;
@Override
   protected void
onCreate(BundlesavedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
 play = findViewById(R.id.play);
pause = findViewById(R.id.pause);
stop = findViewById(R.id.stop);
backward = findViewById(R.id.rewind);
forward = findViewById(R.id.forward);
play.setOnClickListener(new
View.OnClickListener() {
   @Override
   public void onClick(View v) {
      Toast.makeText(MainActivity.this, "Playing Media
now",Toast.LENGTH_SHORT).show();
mediaPlayer = MediaPlayer.create(MainActivity.this,R.raw.song);
mediaPlayer.start();
   }
});


pause.setOnClickListener((new
View.OnClickListener() {
   @Override
   public void onClick(View v) {
   }
}));
stop.setOnClickListener(new View.OnClickListener() {
   @Override
   public void onClick(View v) {        int
currentPosition = mediaPlayer.getCurrentPosition();
if (currentPosition+fwTime <=
mediaPlayer.getDuration())
      {
         mediaPlayer.seekTo(currentPosition+fwTime);
      }
   }
});
```

```java
forward.setOnClickListener(new
View.OnClickListener() {    @Override
    public void onClick(View v) {
        int currentPosition =
mediaPlayer.getCurrentPosition();
        if
(currentPosition+fwTime<=mediaPlayer.getDuration())
        {
            mediaPlayer.seekTo(currentPosition+fwTime);

        }
    }

});

backward.setOnClickListener(new
View.OnClickListener() {
    @Override    public
void onClick(View v) {
        int currentPosition =
mediaPlayer.getCurrentPosition();
if(currentPosition-rwTime >= startTime){
            mediaPlayer.seekTo(currentPosition-rwTime);
        }
    }
});
}}
```

Strings.xml

```xml
<resources>
    <string name="app_name">Mp</string>
    <string name="songname">song</string>
</resources>
```

Mainactivity.java package

com.example.papp;

import androidx.appcompat.app.AppCompatActivity;

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

import android.widget.Button; import

android.widget.EditText; import

android.widget.TextView; import android.widget.Toast;

```java
public class MainActivity extends AppCompatActivity {
    EditText nameText;
    Button click;
    TextView MyLabel;
    @Override    protected void onCreate(Bundle savedInstanceState) {
```

super.onCreate(savedInstanceState);   setContentView(R.layout.activity_main);

nameText=findViewById(R.id.ed);   click=findViewById(R.id.btn);

MyLabel=findViewById(R.id.textView);   click.setOnClickListener(new

View.OnClickListener(){

```java
        @Override          public void onClick(View view){

          String name=nameText.getText().toString();
          MyLabel.setText(name);
          Toast.makeText(MainActivity.this,name+"is happy",
              Toast.LENGTH_LONG).show();
      }
  });
```

Alert dialogue

\<?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"

```xml
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="ALERT

MESSAGE" app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent" />

<Button android:layout_width="match_parent"

android:layout_height="wrap_content"

android:id="@+id/alert" android:layout_marginRight="30dp"

android:layout_marginLeft="30dp"

android:text="CLICKTOALERT"

/>
</LinearLayout>
```

Mainactivity.java

```java
package com.example.alertd; import

androidx.appcompat.app.AlertDialog; import

androidx.appcompat.app.AppCompatActivity; import

android.content.DialogInterface; import android.os.Bundle; import

android.view.View; import android.widget.Button; import

android.widget.Toast; public class MainActivity extends

AppCompatActivity {

Button alertButton ; @Override protected void onCreate(Bundle

savedInstanceState) { super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main); alertButton = findViewById(R.id.alert) ;

alertButton.setOnClickListener(new View.OnClickListener() {

@Override public void onClick(View v) { alertButton = findViewById(R.id.alert) ;

alertButton.setOnClickListener(new View.OnClickListener() {
```

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

//logic for Alert

AlertDialog.Builder builder = new AlertDialog.Builder(MainActivity.this) ;

builder.setIcon(R.drawable.ic_launcher_background) ; builder.setTitle("Alert Title") ;

builder.setMessage("Shall I Close this window, Y/N?") ; builder.setPositiveButton("Yes", new

DialogInterface.OnClickListener() {

@Override
public void onClick(DialogInterface dialog, int which) {
Toast.makeText(MainActivity.this, "You have pressed yes",
Toast.LENGTH_SHORT).show();
}
}); builder.setNegativeButton("No", new DialogInterface.OnClickListener() {

@Override
public void onClick(DialogInterface dialog, int which) {finish(); } });
AlertDialogalertDialog=builder.create(); alertDialog.show(); }
}
); }
}
); }
}
```

IMAGE SWITCHER

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">

<ImageView android:id="@+id/myImg"

android:layout_width="match_parent"

android:layout_height="400dp"
```

android:layout_margin="20dp"

android:src="@drawable/p1"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent" />

<Button
android:id="@+id/click" android:layout_width="match_parent"

android:layout_height="wrap_content" android:text="click"

tools:layout_editor_absoluteX="20dp"

tools:layout_editor_absoluteY="631dp" />

</LinearLayout>

main_activity.java

package com.example.imgswitch; import

androidx.appcompat.app.AppCompatActivity; import

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

android.widget.Button; import android.widget.ImageView;

public class MainActivity extends AppCompatActivity {

ImageView imageView; Button

change; int flag = 1;

@Override protected void onCreate(Bundle

savedInstanceState) { super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main); imageView =

```
findViewById(R.id.myImg); change = findViewById(R.id.click);

change.setOnClickListener(new View.OnClickListener() {

@Override public void onClick(View v)

{ if(flag==1){

imageView.setImageResource(R.draw

able.p1); flag=2 ; }else{

imageView.setImageResource(R.draw

able.p3); flag=1 ;

}

}

});

}

}
```

LIST VIEW:

activity_main.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">

<ListView android:layout_width="match_parent"

android:layout_height="wrap_content"

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

</LinearLayout>
```

mainactivity.java

```java
package com.example.listv; import

androidx.appcompat.app.AppCompatActivity;


import android.os.Bundle;
import android.view.View; import android.widget.AdapterView;

import android.widget.ArrayAdapter; import android.widget.ListView;

import android.widget.Toast; public class MainActivity extends

AppCompatActivity {

ListView myList ;
String countryList[] ;
@Override protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main); myList = findViewById(R.id.list) ;

countryList = getResources().getStringArray(R.array.country) ;

ArrayAdapter<String> arrayAdapter = new

ArrayAdapter<String>(this, R.layout.textview_layout, countryList);

myList.setAdapter(arrayAdapter);

myList.setOnItemClickListener(new


AdapterView.OnItemClickListener() {
@Override public void onItemClick(AdapterView<?> parent, View view, int position, long id) {

Toast.makeText(MainActivity.this, "You have

clicked:"+parent.getItemAtPosition(position),

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

}
}
```

textview_layout.xml

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

```xml
<TextView xmlns:android="http://schemas.android.com/apk/res/android"

android:layout_width="match_parent"

android:layout_height="match_parent" android:text="Content"

android:textSize="40dp"

/>
```

strings.xml

```xml
<resources>
<string name="app_name">listv</string>
<string-array name="country">
<item>India</item>
<item>China</item>
<item>Pakistan</item>
<item>USA</item>
<item>UK</item>
</string-array>
</resources>
```