LP1-ACTIVITY LIFE CYCLE

```
Main activity
package com.example.exptt3;
import androidx.appcompat.app.AppCompatActivity;
import
android.os.Bundle;
import
android.widget.Toas
t:
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
  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 version="1.0" encoding="utf-8"?>
```



<androidx.constraintlayout.widget.Co nstraintLayout xmlns:android="http://schemas.andro id.com/apk/res/android" xmlns:app="http://schemas.android.c om/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" 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.AppCompatActivit
y; 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);
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 version="1.0" encoding="utf-8"?>
<LinearLayout

xmlns:android="http://schemas.android.com/apk/res/and
roid" xmlns:app="http://schemas.android.com/apk/res-
auto" xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"</pre>
```



```
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 version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/and
roid" 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_pa
rent"
android:layout_height="wrap_co
ntent" android:hint="ENTER
YOUR NAME" /> <Button
android:id="@+id/click"
android:layout_width="match_pa
rent"
android:layout_height="wrap_co
ntent" android:text="click" />
</LinearLayout>
```



mainActivity

```
package com.example.expl; import
androidx.appcompat.app.AppCompatActivit
y; 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() {
@Override public void
onClick(View view) { Intent it
= new
Intent(MainActivity.this,
```



```
MainActivity2.class);
Bundle b = new Bundle();
b.putString("name",name.getText().to
String()); it.putExtras(b);
startActivity(it);
}
});
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/and
roid" 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
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=<u>http://schemas.android.com/apk/res/android</u>
```

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"
/>
<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 version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android=<u>http://schemas.android.com/apk/res/andr</u>
oid 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"</pre>



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



t="#000000"/> <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"
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>

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,equals,CLEAR;

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);
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((m
Array[0])); Double
op2=Double.parseDouble((m
Array[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.AppC
ompatActivity;
import
android.os.Bundle;
import
android.view.View;
import
android.widget.Bu
tton; import
android.widget.Ed
itText; import
android.widget.Te
xtView; import
android.widget.To
ast:
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(savedInsta
nceState);
setContentView(R.layout.activity_
main);
setContentView(R.layout.a
ctivity_main);
register=findViewById(R.id.
             update =
register);
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.setOnClickListene
r(new
View.OnClickListener() {
      @Override
                        public void onClick(View
                myDbHelper = new
view) {
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
                myDbHelper = new
view) {
DbHelper(MainActivity.this, dbName, null, dbVersion);
myDbHelper.update(uname.getText().toString(),upas
s.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
package com.example.sqlite;
import
android.content.ContentValue
s; import
android.content.Context;
import
android.database.Cursor;
import
android.database.sqlite.SQLit
eDatabase; import
android.database.sqlite.SQLit
eOpenHelper; import
androidx.annotation.Nullable;
public class DbHelper extends SQLiteOpenHelper {
  private static final String dbName =
"studentdb"; // Database Name
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 version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/a
pk/res/android"
xmlns:app="http://schemas.android.com/apk/r
es-auto"
xmlns:tools="http://schemas.android.com/tool
s"
    android:layout_width="match_parent"
android:layout_height="match_parent"
android:orientation="vertical"
tools:context=".MainActivity">
  <EditText
```



```
android:id="@+id/uname
android:layout_width="m
atch_parent"
android:layout_height="w
rap_content"
android:ems="10"
android:inputType="textP
ersonName"
android:text="Name" />
  <EditText
android:id="@+id/upass"
android:layout_width="m
atch_parent"
android:layout_height="w
rap_content"
android:ems="10"
```



```
android:inputType="textP
ersonName"
android:text="Name" />
  <Button
android:id="@+id/login"
android:layout_width="m
atch_parent"
android:layout_height="w
rap_content"
android:text="Button" />
  <Button
android:id="@+id/reg
ister"
android:layout_width
="match_parent"
android:layout_height
```

="wrap_content"



```
android:text="Button"
/>
  <Button
android:id="@+id/delete"
android:layout_width="m
atch_parent"
android:layout_height="w
rap_content"
android:text="Button" />
  <Button
android:id="@+id/update
android:layout_width="m
atch_parent"
android:layout_height="w
rap_content"
android:text="Button" />
```



```
<Button
android:id="@+id/display
android:layout_width="m
atch_parent"
android:layout_height="w
rap_content"
android:text="Button" />
  <TextView
android:id="@+id/res"
android:layout_width="m
atch_parent"
android:layout_height="
wrap_content"
android:text="TextView"
/>
```

MEDIAPLAYER:



Activitymain.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/a
pk/res/android"
xmlns:app="http://schemas.android.com/apk/r
es-auto"
xmlns:tools="http://schemas.android.com/tool
    android:layout_width="match_parent"
android:layout_height="match_parent"
android:background="#80b3ff"
tools:context=".MainActivity"
android:orientation="vertical">
  <TextView
android:layout_width="match_pa
rent"
android:layout_height="wrap_con
tent"
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="3 0dp" android:layout_marginRight=" 30dp" android:backgroundTint="#ff 99ff"/> <Button android:layout_width="match _parent" android:layout_height="wrap_ content" android:text="Pause" android:id="@+id/pause" android:layout_marginLeft="3 0dp" android:layout_marginRight=" 30dp" android:backgroundTint="#ff 99ff"/> <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="30d android:backgroundTint="#ff99ff



```
"/>
```

```
<Button
android:layout_width="match
_parent"
android:layout_height="wrap_
content"
android:text="Backward"
android:id="@+id/rewind"
android:layout_marginLeft="3
0dp"
android:backgroundTint="#ff
android:layout_marginRight="
30dp"/> <Button
android:layout_width="match
_parent"
android:layout_height="wrap_
content"
android:backgroundTint="#ff
         android:text="stop"
android:id="@+id/stop"
android:layout_marginLeft="3
0dp"
android:layout_marginRight="
30dp"/>
</LinearLayout>
```

Mainactivity.java



```
package com.example.mp;
import
androidx.appcompat.app.AppCo
mpatActivity;
import
android.media.Media
Player; import
android.os.Bundle;
import
android.view.View;
import
android.widget.Butto
n; import
android.widget.Toast;
public class MainActivity extends
AppCompatActivity {
  Button
play,pause,stop,backward,forward;
  MediaPlayer
mediaPlayer;
int fwTime = 5000;
int rwTime =
5000; int
startTime=0;
@Override
  protected void
onCreate(BundlesavedInstanceStat
e)
     super.onCreate(savedInstanc
{
```



```
eState);
setContentView(R.layout.activity_m
ain);
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+f
wTime);
    }
});
forward.setOnClickListener(new
View.OnClickListener() {
                         @Override
  public void onClick(View v) {
    int currentPosition =
mediaPlayer.getCurrentPosition();
    if
(currentPosition+fwTime<=mediaPlay
er.getDuration())
    {
mediaPlayer.seekTo(currentPosition+f
wTime);
});
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
```

```
<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;
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(){
      @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"
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_toBottom
```



```
Of="parent"
app:layout_constraintEnd_toEndOf="par
ent"
app:layout_constraintStart_toStartOf="p
arent"
app:layout_constraintTop_toTopOf="par
ent"/>
<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

package com.example.alertd; import
androidx.appcompat.app.AlertDialog;
import
androidx.appcompat.app.AppCompatActivi



```
ty; 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() {
@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 version="1.0" encoding="utf-8"?>
<LinearLayout
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"
android:orientation="vertical"
tools:context=".MainActivity">
<lmageView android:id="@+id/myImg"</pre>
android:layout_width="match_parent"
android:layout_height="400dp"
android:layout_margin="20dp"
android:src="@drawable/p1"
app:layout_constraintBottom_toBottom
Of="parent"
app:layout_constraintEnd_toEndOf="par
ent"
```



app:layout_constraintStart_toStartOf="p
arent"

app:layout_constraintTop_toTopOf="par
ent" />

<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.AppCompatActi vity; 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.se
tImageResource(R.drawabl
e.p1); flag=2;
}else{ imageView.setImag
eResource(R.drawable.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_paren
```



```
t"
android:layout_height="wrap_conten
t" android:id="@+id/list"/>
</LinearLayout>
```

mainactivity.java

import android.os.Bundle;

package com.example.listv; import androidx.appcompat.app.AppCompatA ctivity;

```
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.count
ry);
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 version="1.0" encoding="utf-8"?>
<TextView
xmlns:android="http://schemas.android.co
m/apk/res/android"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:text="Content"
android:textSize="40dp"
/> strings.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>
```



