—------------------------------------------**DATABASE**:-------------------------------------------------------

.KT

package com.example.db\_crud

class MainActivity : AppCompatActivity() {

lateinit var ed\_name:EditText

lateinit var ed\_sem:EditText

lateinit var btn\_insert:Button

lateinit var btn\_update:Button

lateinit var btn\_delete:Button

lateinit var btn\_clear:Button

lateinit var btn\_next:Button

lateinit var btn\_previous:Button

lateinit var btn\_first:Button

lateinit var btn\_last:Button

lateinit var btn\_all\_record:Button

lateinit var search:SearchView

lateinit var lv:ListView

lateinit var rs:Cursor

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

ed\_name=findViewById(R.id.*ed\_name*)

ed\_sem=findViewById(R.id.*ed\_sem*)

btn\_insert=findViewById(R.id.*btn\_insert*)

btn\_update=findViewById(R.id.*btn\_update*)

btn\_delete=findViewById(R.id.*btn\_delete*)

btn\_clear=findViewById(R.id.*btn\_clear*)

btn\_next=findViewById(R.id.*btn\_next*)

btn\_previous=findViewById(R.id.*btn\_previous*)

btn\_first=findViewById(R.id.*btn\_First*)

btn\_last=findViewById(R.id.*btn\_last*)

btn\_all\_record=findViewById(R.id.*btn\_all\_record*)

search=findViewById(R.id.*search*)

lv=findViewById(R.id.*lv*)

var helper=MyDbHelper(*applicationContext*)

var db=helper.*writableDatabase*

Toast.makeText(*applicationContext*,"Database and Table Created",Toast.*LENGTH\_LONG*).show()

rs=db.rawQuery("SELECT SID \_id,SNAME,SEM FROM STUDENT",null)

if(rs.moveToFirst()){

ed\_name.setText(rs.getString(1))

ed\_sem.setText(rs.getString(2))

}

*//------------------------------insert*

btn\_insert.setOnClickListener **{**

var cv = ContentValues()

cv.put("SNAME",ed\_name.*text*.toString())

cv.put("SEM",ed\_sem.*text*.toString())

db.insert("STUDENT",null,cv)

rs = db.rawQuery("SELECT SID \_id, SNAME, SEM FROM STUDENT",null)

showMessage("Record Inserted Successfully...")

clear()

**}**

*//------------------------------update*

btn\_update.setOnClickListener **{**

var cv = ContentValues()

cv.put("SNAME",ed\_name.*text*.toString())

cv.put("SEM",ed\_sem.*text*.toString())

db.update("STUDENT",cv,"SID = ?", *arrayOf*(rs.getString(0)))

rs = db.rawQuery("SELECT SID \_id, SNAME, SEM FROM STUDENT",null)

showMessage("Record Updated Successfully...")

clear()

**}**

*//------------------------------delete*

btn\_delete.setOnClickListener **{**

db.delete("STUDENT","SID = ?", *arrayOf*(rs.getString(0)))

rs = db.rawQuery("SELECT SID \_id, SNAME, SEM FROM STUDENT",null)

showMessage("Record Deleted Successfully...")

clear()

**}**

*//------------------------------next*

btn\_next.setOnClickListener **{**

if (rs.moveToFirst()){

ed\_name.setText(rs.getString(1))

ed\_sem.setText(rs.getString(2))

}else if(rs.moveToFirst()){

ed\_name.setText(rs.getString(1))

ed\_sem.setText(rs.getString(2))

}else{

Toast.makeText(*applicationContext*,"data not found",Toast.*LENGTH\_SHORT*).show()

}

**}**

*//------------------------ Previous*

btn\_previous.setOnClickListener **{**

if(rs.moveToPrevious()){

ed\_name.setText(rs.getString(1))

ed\_sem.setText(rs.getString(2))

}else if(rs.moveToLast()){

ed\_name.setText(rs.getString(1))

ed\_sem.setText(rs.getString(2))

}else{

Toast.makeText(*applicationContext*, "Data not found", Toast.*LENGTH\_SHORT*).show()

}

**}**

*// -- ----------------------first*

btn\_first.setOnClickListener **{**

if (rs.moveToFirst()){

ed\_name.setText(rs.getString(1))

ed\_sem.setText(rs.getString(2))

}else {

Toast.makeText(*applicationContext*,"Data not found",Toast.*LENGTH\_SHORT*).show()

}

**}**

*//------------------------------last*

btn\_last.setOnClickListener **{**

if (rs.moveToLast()){

ed\_name.setText(rs.getString(1))

ed\_sem.setText(rs.getString(2))

}else {

Toast.makeText(*applicationContext*,"Data not found",Toast.*LENGTH\_SHORT*).show()

}

**}**

*//----------------------------showall*

btn\_all\_record.setOnClickListener **{**

var adapter =SimpleCursorAdapter(*applicationContext*,R.layout.*my\_layout*,rs,

*arrayOf*("SNAME","SEM"),

*intArrayOf*(R.id.*textView1*,R.id.*textView2*))

lv.*adapter*= adapter

search.setOnQueryTextListener(object : SearchView.OnQueryTextListener {

override fun onQueryTextSubmit(p0: String?): Boolean {

return false

}

override fun onQueryTextChange(p0: String?): Boolean {

rs=db.rawQuery("SELECT SID \_id,SNAME,SEM FROM STUDENT WHERE SNAME LIKE '%${p0}%'",null)

adapter.changeCursor(rs)

return false

}

})

**}**

*//clear button*

btn\_clear.setOnClickListener **{**

clear()

**}**

}

private fun clear() {

ed\_name.setText("")

ed\_sem.setText("")

}

private fun showMessage(s: String) {

AlertDialog.Builder(this)

.setTitle("Success!")

.setMessage(s)

.setPositiveButton("ok",DialogInterface.OnClickListener **{** dialogInterface, i **->**

if (rs.moveToFirst()){

ed\_name.setText(rs.getString(1))

ed\_sem.setText(rs.getString(2))

}else{

Toast.makeText(*applicationContext*,"Data not found",Toast.*LENGTH\_SHORT*).show()

}

**}**).show()

}

}

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="wrap\_content"

android:orientation="vertical"

tools:context=".MainActivity">

<EditText

android:id="@+id/ed\_name"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter sname"

android:textSize="25dp"

android:layout\_marginBottom="5dp"

/>

<EditText

android:id="@+id/ed\_sem"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter sem"

android:textSize="25dp"

android:layout\_marginBottom="5dp"

/>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

tools:context=".MainActivity">

<Button

android:id="@+id/btn\_insert"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Insert"

android:layout\_marginEnd="7dp"

android:layout\_marginStart="10dp"

/>

<Button

android:id="@+id/btn\_update"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Update"

android:layout\_marginEnd="7dp"

/>

<Button

android:id="@+id/btn\_delete"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Delete"

android:layout\_marginEnd="7dp"

/>

<Button

android:id="@+id/btn\_clear"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="clear"

android:layout\_marginEnd="7dp"

/>

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

tools:context=".MainActivity">

<Button

android:id="@+id/btn\_next"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Next"

android:layout\_marginEnd="7dp"

android:layout\_marginStart="10dp"

/>

<Button

android:id="@+id/btn\_previous"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Previous"

android:layout\_marginEnd="7dp"

/>

<Button

android:id="@+id/btn\_First"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="First"

android:layout\_marginEnd="7dp"

/>

<Button

android:id="@+id/btn\_last"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Last"

android:layout\_marginEnd="7dp"

/>

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="vertical"

tools:context=".MainActivity">

<Button

android:id="@+id/btn\_all\_record"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Show All Records"

android:layout\_marginTop="10dp"

/>

<SearchView

android:id="@+id/search"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

/>

<ListView

android:id="@+id/lv"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"/>

</LinearLayout>

</LinearLayout>

—---------------Custom layout:

My\_layout.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="horizontal"

>

<TextView

android:id="@+id/textView1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:textSize="20dp"

android:textColor="@color/black"

android:background="#91A8BF"

android:layout\_margin="5dp"

android:gravity="center"

android:padding="5dp"

android:text="" />

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:textSize="20dp"

android:gravity="center"

android:layout\_margin="5dp"

android:textColor="@color/black"

android:background="#91A8BF"

android:padding="5dp"

android:text="" />

</LinearLayout>

—----------------------------------------------**File Handling:**-------------------------------------------------

.kt

package com.example.filehandling

import android.content.Context

import android.content.DialogInterface

import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

import android.widget.Button

import android.widget.EditText

import androidx.appcompat.app.AlertDialog

import java.io.BufferedReader

import java.io.InputStreamReader

class MainActivity : AppCompatActivity() {

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

var ed\_text:EditText=findViewById(R.id.*editTextTextMultiLine*)

var btn\_write:Button=findViewById(R.id.*button*)

var btn\_read:Button=findViewById(R.id.*button2*)

var builder= AlertDialog.Builder(this)

btn\_write.setOnClickListener **{**

var fop =openFileOutput("myfile",Context.*MODE\_PRIVATE*)

fop.write(ed\_text.*text*.toString().*toByteArray*())

builder.setTitle("file handling")

builder.setMessage("your Data Saved")

builder.setPositiveButton("ok",DialogInterface.OnClickListener **{** dialogInterface, i **->**

**}**)

builder.setNegativeButton("Cancel",DialogInterface.OnClickListener **{** dialogInterface, i **->**

**}**)

builder.setNeutralButton("close",DialogInterface.OnClickListener **{** dialogInterface, i **->**

**}**)

builder.show()

**}**

btn\_read.setOnClickListener **{**

var line:String?=""

var fip=*application*.openFileInput("myfile")

var br=BufferedReader(InputStreamReader(fip))

while(line!=null)

{

line=br.readLine()

if(line!=null){

ed\_text.append(line+"\n")

}

}

**}**

}

}

Activity.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">

<EditText

android:id="@+id/editTextTextMultiLine"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="85dp"

android:ems="10"

android:gravity="start|top"

android:inputType="textMultiLine"

android:lines="5"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="15dp"

android:layout\_marginEnd="25dp"

android:text="write"

app:layout\_constraintEnd\_toStartOf="@+id/button2"

app:layout\_constraintHorizontal\_chainStyle="packed"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/editTextTextMultiLine" />

<Button

android:id="@+id/button2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="11dp"

android:text="Read"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/button"

app:layout\_constraintTop\_toBottomOf="@+id/editTextTextMultiLine" />

</androidx.constraintlayout.widget.ConstraintLayout>

—---------------------------------------**Date and Time**:-----------------------------------------------

.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/e1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="Select Date"

android:inputType="date" />

<EditText

android:id="@+id/e2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="select time"

android:inputType="time" />

</LinearLayout>

.kt

package com.example.first

class MainActivity : AppCompatActivity() {

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

var etdate : EditText=findViewById(R.id.*e1*)

var c=Calendar.getInstance()

var timepic:EditText=findViewById(R.id.*e2*)

etdate.setOnClickListener **{**

DatePickerDialog(this,DatePickerDialog.OnDateSetListener **{** datePicker, i, i2, i3 **->**

etdate.setText("$i/${i2+1}/$i3")

**}**,c.get(Calendar.*YEAR*),c.get(Calendar.*MONTH*),c.get(Calendar.*DAY\_OF\_MONTH*)).show()

**}**

timepic.setOnClickListener **{**

TimePickerDialog(this,TimePickerDialog.OnTimeSetListener **{** timePicker, i, i2**->**

timepic.setText("$i:$i2")

**}**,c.get(Calendar.*HOUR*),c.get(Calendar.*MINUTE*),false).show()

**}**

}

}

—------------------------------------**Relative Layout**—-------------------------------------------------

.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/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="297dp"

android:layout\_marginBottom="625dp"

android:text="Button" />

<ToggleButton

android:id="@+id/toggleButton"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="202dp"

android:layout\_marginBottom="618dp"

android:text="OFF" />

<ImageView

android:id="@+id/imageView"

android:layout\_width="200dp"

android:layout\_height="200dp"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="216dp"

android:layout\_marginBottom="378dp"

app:srcCompat="@drawable/off" />

<ImageButton

android:id="@+id/imageButton2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="8dp"

android:layout\_marginBottom="509dp"

android:scaleType="matrix"

app:srcCompat="@drawable/androidimg" />

<com.google.android.material.floatingactionbutton.FloatingActionButton

android:id="@+id/floatingActionButton"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="18dp"

android:layout\_marginBottom="17dp"

android:clickable="true"

app:srcCompat="@android:drawable/btn\_star\_big\_on" />

<CheckBox

android:id="@+id/checkBox"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="306dp"

android:layout\_marginBottom="257dp"

android:text="JAVA" />

<CheckBox

android:id="@+id/checkBox2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="290dp"

android:layout\_marginBottom="201dp"

android:text="Android" />

<CheckBox

android:id="@+id/checkBox3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="303dp"

android:layout\_marginBottom="142dp"

android:text="Kotlin" />

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="278dp"

android:layout\_marginBottom="67dp"

android:text="TextView"

android:textSize="15dp" />

<RadioGroup

android:id="@+id/radiogroup"

android:layout\_width="180dp"

android:layout\_height="185dp"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="14dp"

android:layout\_marginBottom="103dp">

<RadioButton

android:id="@+id/radioButton4"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="MCA" />

<RadioButton

android:id="@+id/radioButton5"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="BCA" />

<RadioButton

android:id="@+id/radioButton6"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="MSCIT" />

</RadioGroup>

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="85dp"

android:layout\_marginBottom="47dp"

android:text="" />

<Button

android:id="@+id/button2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="40dp"

android:layout\_marginBottom="307dp"

android:text="RESET" />

<EditText

android:id="@+id/editTextPhone"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentEnd="true"

android:layout\_alignParentBottom="true"

android:layout\_marginEnd="12dp"

android:layout\_marginBottom="403dp"

android:ems="10"

android:hint="Enter number"

android:inputType="phone" />

</RelativeLayout>

.kt

package com.example.relative\_layout

class MainActivity : AppCompatActivity() {

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

var btn:Button=findViewById(R.id.*button*)

var imgbtn:ImageButton=findViewById(R.id.*imageButton2*)

var tglbtn:ToggleButton=findViewById(R.id.*toggleButton*)

var imgView:ImageView=findViewById(R.id.*imageView*)

btn.setOnClickListener**{**

Toast.makeText(*applicationContext*,"button Clicked",Toast.*LENGTH\_LONG*).show()

**}**

imgbtn.setOnClickListener**{**

Toast.makeText(*applicationContext*," image button Clicked",Toast.*LENGTH\_LONG*).show()

**}**

tglbtn.setOnClickListener**{**

if (tglbtn.*text*.equals("OFF")){

imgView.setImageResource(R.drawable.*off*)

}

else{

imgView.setImageResource(R.drawable.*on*)

}

**}**

var ch1:CheckBox=findViewById(R.id.*checkBox*)

var ch2:CheckBox=findViewById(R.id.*checkBox2*)

var ch3:CheckBox=findViewById(R.id.*checkBox3*)

var textv1:TextView=findViewById(R.id.*textView*)

var rg:RadioGroup=findViewById(R.id.*radiogroup*)

var rset:Button=findViewById(R.id.*button2*)

var tv1:TextView=findViewById(R.id.*textView2*)

var str:String

ch1.setOnClickListener **{**

str="JAVA :${ch1.*isChecked*}\n ANDROID:${ch2.*isChecked*}\n KOTLIN:${ch3.*isChecked*}"

textv1.setText(str)

**}**

ch2.setOnClickListener **{**

str="JAVA :${ch1.*isChecked*}\n ANDROID:${ch2.*isChecked*}\n KOTLIN:${ch3.*isChecked*}"

textv1.setText(str)

**}**

ch3.setOnClickListener **{**

str="JAVA :${ch1.*isChecked*}\n ANDROID:${ch2.*isChecked*}\n KOTLIN:${ch3.*isChecked*}"

textv1.setText(str)

**}**

rg.setOnCheckedChangeListener **{** radioGroup, i **->**

var rb=findViewById<RadioButton>(i)

if(rb!=null){

tv1.setText(rb.*text*)

}

**}**

rset.setOnClickListener **{**

rg.clearCheck()

tv1.setText("select option")

**}**

var num1:EditText=findViewById(R.id.*editTextPhone*)

var flotview:FloatingActionButton=findViewById(R.id.*floatingActionButton*)

}

}

=======================================================================

—----------------------------------**SharedPrefernce**—------------------------------------------

.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:padding="20dp"

android:orientation="vertical"

tools:context=".MainActivity">

<TextView

android:id="@+id/text\_view"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Shared Prefernce"

android:textSize="30dp"

android:gravity="center"

/>

<EditText

android:id="@+id/user\_nm"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="20dp"

android:hint="Enter UserName"

/>

<EditText

android:id="@+id/user\_ps"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="20dp"

android:hint="Enter Password"

android:inputType="numberPassword"

/>

<Button

android:id="@+id/save\_btn"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="20dp"

android:text="Save"

android:textSize="30dp"

/>

<Button

android:id="@+id/dis\_btn"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Display"

android:textSize="30dp"

/>

</LinearLayout>

.kt

package com.example.sharedprefernce

class MainActivity : AppCompatActivity() {

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

*// var tv:TextView=findViewById(R.id.text\_view)*

var user\_nm:EditText=findViewById(R.id.user\_nm)

var user\_ps:EditText=findViewById(R.id.user\_ps)

var save\_btn:Button=findViewById(R.id.save\_btn)

var dis\_btn:Button=findViewById(R.id.dis\_btn)

var sp=*application*.getSharedPreferences("logindata",Context.*MODE\_PRIVATE*)

var editor=sp.edit()

save\_btn.setOnClickListener **{**

editor.putString("username",user\_nm.*text*.toString())

editor.putString("password",user\_ps.*text*.toString())

editor.commit()

Toast.makeText(*applicationContext*,"Data Saved",Toast.*LENGTH\_LONG*).show()

user\_nm.setText("")

user\_ps.setText("")

**}**

dis\_btn.setOnClickListener **{**

user\_nm.setText(sp.getString("username",""))

user\_ps.setText(sp.getString("password",""))

**}**

}

}

—-------------------------------------**TWEENED ANIMATION**—-----------------------------------

.KT

**class** MainActivity : AppCompatActivity() {

**override fun** onCreate(savedInstanceState: Bundle?) {

**super**.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

**var** iv:ImageView=findViewById(R.id.*imageView*)

**var** spin:Button=findViewById(R.id.*button13*)

spin.setOnClickListener**{**

**var** an= AnimationUtils.loadAnimation(**this**,R.anim.*spin*)

iv.startAnimation(an)

**}**

**var** zoom:Button=findViewById(R.id.*button14*)

zoom.setOnClickListener**{**

**var** an= AnimationUtils.loadAnimation(**this**,R.anim.*zoom*)

iv.startAnimation(an)

**}**

**var** move:Button=findViewById(R.id.*button15*)

move.setOnClickListener**{**

**var** an= AnimationUtils.loadAnimation(**this**,R.anim.*move*)

iv.startAnimation(an)

**}**

**var** blink:Button=findViewById(R.id.*button16*)

blink.setOnClickListener**{**

**var** an= AnimationUtils.loadAnimation(**this**,R.anim.*blink*)

iv.startAnimation(an)

**}**

}

}

Anim-1.blink.xml

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

<**set xmlns:android="http://schemas.android.com/apk/res/android"**>

<**alpha**

**android:duration="3000"**

**android:fromAlpha="0.1"**

**android:toAlpha="1"**

**android:repeatMode="reverse"**>

</**alpha**>

</**set**>

2.MOVE.XML

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

<**set xmlns:android="http://schemas.android.com/apk/res/android"**>

<**translate**

**android:duration="3000"**

**android:fromXDelta="-1400"**>

</**translate**>

<**translate**

**android:duration="3000"**

**android:toXDelta="1300"**>

</**translate**>

</**set**>

3.SPIN.XML

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

<**set xmlns:android="http://schemas.android.com/apk/res/android"**>

<**rotate android:fromDegrees="0"**

**android:toDegrees="360"**

**android:duration="3000"**

**android:pivotX="50%"**

**android:pivotY="50%"**>

</**rotate**>

</**set**>

4.ZOOM=.XML

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

<**set xmlns:android="http://schemas.android.com/apk/res/android"**>

<**scale**

**android:duration="3000"**

**android:pivotY="50%"**

**android:pivotX="50%"**

**android:fromXScale="1.0"**

**android:toXScale="2.0"**

**android:fromYScale="1.0"**

**android:toYScale="2.0"**>

</**scale**>

</**set**>

—-----------------------------------------------**REVERCE LOCATION**—-----------------------------

.KT

**class** MainActivity : AppCompatActivity() {

**lateinit var lm** :LocationManager

**lateinit var loc** :Location

**lateinit var tv**: TextView

**override fun** onCreate(savedInstanceState: Bundle?) {

**super**.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

**tv**=findViewById(R.id.*textView*)

**if**(ActivityCompat.checkSelfPermission(**this**,android.Manifest.permission.*ACCESS\_FINE\_LOCATION*)!=

PackageManager.*PERMISSION\_GRANTED*){

ActivityCompat.requestPermissions(**this**, *arrayOf*(

android.Manifest.permission.*ACCESS\_FINE\_LOCATION*,

android.Manifest.permission.*ACCESS\_COARSE\_LOCATION*

),111)

}

**lm** = getSystemService(Context.*LOCATION\_SERVICE*)**as** LocationManager

**loc**=**lm**.getLastKnownLocation(LocationManager.*GPS\_PROVIDER*)!!

**var** a=**object** :LocationListener{

**override fun** onLocationChanged(p0: Location) {

reverseGeocode(p0)

}

}

**lm**.requestLocationUpdates(LocationManager.*GPS\_PROVIDER*,100,100.2f,a)

}

**private fun** reverseGeocode(loc: Location?) {

**var** gc =Geocoder(**this**, Locale.getDefault())

**var** addresses = gc.getFromLocation(loc!!.*latitude*,loc.*longitude*,2)

**var** address= addresses.get(0)

**tv**.setText(**"${**address.getAddressLine(0)**}\n${**address.*locality***}"**)

}

}

<**uses-permission android:name="android.permission.ACCESS\_COARSE\_LOCATION"**/>

—----------------------------------------**FORWARD LOCATION**—-------------------------------------------

PERMISSION:-

<**uses-permission android:name="android.permission.ACCESS\_FINE\_LOCATION"**/>

<**uses-permission android:name="android.permission.ACCESS\_COARSE\_LOCATION"**/>

<**uses-permission android:name="android.permission.INTERNET"**/>

.KT

**class** MainActivity : AppCompatActivity() {

**lateinit var** ed:EditText

**lateinit var** btn:Button

**lateinit var** tv:TextView

**override fun** onCreate(savedInstanceState: Bundle?) {

**super**.onCreate(savedInstanceState)

setContentView(R.layout.activity\_main)

ed=findViewById(R.id.ed)

btn=findViewById(R.id.btn)

tv=findViewById(R.id.tv)

**if** (ActivityCompat.checkSelfPermission(**this**,android.Manifest.permission.ACCESS\_FINE\_LOCATION)!=PackageManager.PERMISSION\_GRANTED)

{

ActivityCompat.requestPermissions(**this**, arrayOf(android.Manifest.permission.ACCESS\_FINE\_LOCATION,android.Manifest.permission.ACCESS\_COARSE\_LOCATION),111)

}**else**{

btn.setOnClickListener **{**

**var** city = ed.text.toString()

forwardGeolocation(city)

**}**

}

}

**override fun** onRequestPermissionsResult(

requestCode: Int,

permissions: Array<**out** String>,

grantResults: IntArray

) {

**super**.onRequestPermissionsResult(requestCode, permissions, grantResults)

**if**(requestCode==111 && grantResults[0] == PackageManager.PERMISSION\_GRANTED)

{

**var** city= ed.text.toString()

forwardGeolocation(city)

}

}

**private fun** forwardGeolocation(city: String) {

**var** gc=Geocoder(**this**, Locale.getDefault() )

**var** addressess = gc.getFromLocationName(city,2)

**var** address=addressess.get(0)

tv.setText(**"${**address.longitude**}\n${**address.latitude**}\n${**address.locality**}"**)

}

}

—-----------------------------**FRAME BY FRAME ANIMATION**—-------------------------

.KT

**class** MainActivity : AppCompatActivity() {

**override fun** onCreate(savedInstanceState: Bundle?) {

**super**.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

**var** ad =AnimationDrawable()

**var** frame1=*resources*.getDrawable(R.drawable.*frame1*,**null**)

**var** frame2=*resources*.getDrawable(R.drawable.*frame2*,**null**)

**var** frame3=*resources*.getDrawable(R.drawable.*frame3*,**null**)

**var** frame4=*resources*.getDrawable(R.drawable.*frame4*,**null**)

**var** frame5=*resources*.getDrawable(R.drawable.*frame5*,**null**)

**var** frame6=*resources*.getDrawable(R.drawable.*frame6*,**null**)

**var** frame7=*resources*.getDrawable(R.drawable.*frame7*,**null**)

ad.addFrame(frame1,50)

ad.addFrame(frame2,10)

ad.addFrame(frame3,10)

ad.addFrame(frame4,20)

ad.addFrame(frame5,10)

ad.addFrame(frame6,10)

ad.addFrame(frame7,30)

**var** iv:ImageView= findViewById(R.id.*iv*)

iv.*background*=ad

ad.start()

—-----------------------------------**CONTACTAPP**—-------------------------------------------

.KT

**class** MainActivity : AppCompatActivity() {

**companion object** {

**private const val REQUEST\_CODE\_READ\_CONTACTS** = 111

**private const val REQUEST\_CODE\_CALL\_PHONE** = 112

**private const val REQUEST\_CODE\_ADD\_CONTACT** = 113

}

**private val cols** = *arrayOf*(

ContactsContract.CommonDataKinds.Phone.*DISPLAY\_NAME*,

ContactsContract.CommonDataKinds.Phone.*NUMBER*,

ContactsContract.CommonDataKinds.Phone.*\_ID*

)

**private lateinit var listView**: ListView

**private lateinit var searchView**: SearchView

**private lateinit var adapter**: SimpleCursorAdapter

**override fun** onCreate(savedInstanceState: Bundle?) {

**super**.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_main*)

**listView** = findViewById(R.id.*listview*)

**searchView** = findViewById(R.id.*search\_view*)

**val** btnAdd: FloatingActionButton = findViewById(R.id.*btn\_add*)

btnAdd.setOnClickListener **{**

**val** intent = Intent(Intent.*ACTION\_INSERT*)

intent.*type* = ContactsContract.Contacts.*CONTENT\_TYPE*

startActivity(intent)

**}**

**searchView**.setOnQueryTextListener(**object** : SearchView.OnQueryTextListener {

**override fun** onQueryTextSubmit(query: String?): Boolean {

query?.*let* **{** filterContacts(**it**) **}**

**return true**

}

**override fun** onQueryTextChange(newText: String?): Boolean {

newText?.*let* **{** filterContacts(**it**) **}**

**return true**

}

})

*// Register context menu for ListView*

registerForContextMenu(**listView**)

**if** (ContextCompat.checkSelfPermission(**this**, Manifest.permission.*READ\_CONTACTS*) != PackageManager.*PERMISSION\_GRANTED*) {

ActivityCompat.requestPermissions(**this**, *arrayOf*(Manifest.permission.*READ\_CONTACTS*), **REQUEST\_CODE\_READ\_CONTACTS**)

} **else** {

setupContactsList()

}

}

**override fun** onResume() {

**super**.onResume()

*// Refresh contacts list when the activity resumes*

setupContactsList()

}

**override fun** onRequestPermissionsResult(requestCode: Int, permissions: Array<**out** String>, grantResults: IntArray) {

**super**.onRequestPermissionsResult(requestCode, permissions, grantResults)

**if** (requestCode == **REQUEST\_CODE\_READ\_CONTACTS** && grantResults.*isNotEmpty*() && grantResults[0] == PackageManager.*PERMISSION\_GRANTED*) {

setupContactsList()

} **else if** (requestCode == **REQUEST\_CODE\_CALL\_PHONE** && grantResults.*isNotEmpty*() && grantResults[0] == PackageManager.*PERMISSION\_GRANTED*) {

*// Permission for CALL\_PHONE granted*

}

}

**override fun** onActivityResult(requestCode: Int, resultCode: Int, data: Intent?) {

**super**.onActivityResult(requestCode, resultCode, data)

**if** (requestCode == **REQUEST\_CODE\_ADD\_CONTACT**) {

setupContactsList()

}

}

**private fun** setupContactsList() {

**val** rs = *contentResolver*.query(

ContactsContract.CommonDataKinds.Phone.*CONTENT\_URI*,

**cols**,

**null**,

**null**,

ContactsContract.CommonDataKinds.Phone.*DISPLAY\_NAME*

)

**adapter** = SimpleCursorAdapter(

**this**,

android.R.layout.*simple\_list\_item\_2*,

rs,

**cols**,

*intArrayOf*(android.R.id.*text1*, android.R.id.*text2*),

0

)

**listView**.*adapter* = **adapter**

*// Handle item clicks*

**listView**.setOnItemClickListener **{** \_, \_, position, \_ **->**

**val** cursor = **listView**.*adapter*.getItem(position) **as** Cursor

**val** phoneNumber = cursor.getString(cursor.getColumnIndex(ContactsContract.CommonDataKinds.Phone.*NUMBER*))

**if** (ContextCompat.checkSelfPermission(**this**, Manifest.permission.*CALL\_PHONE*) != PackageManager.*PERMISSION\_GRANTED*) {

ActivityCompat.requestPermissions(**this**, *arrayOf*(Manifest.permission.*CALL\_PHONE*), **REQUEST\_CODE\_CALL\_PHONE**)

} **else** {

makeCall(phoneNumber)

}

**}**

}

**private fun** filterContacts(query: String) {

**val** selection = **"${**ContactsContract.CommonDataKinds.Phone.*DISPLAY\_NAME***} LIKE ?"**

**val** selectionArgs = *arrayOf*(**"%$**query**%"**)

**val** rs = *contentResolver*.query(

ContactsContract.CommonDataKinds.Phone.*CONTENT\_URI*,

**cols**,

selection,

selectionArgs,

ContactsContract.CommonDataKinds.Phone.*DISPLAY\_NAME*

)

**adapter**.changeCursor(rs)

}

**private fun** makeCall(phoneNumber: String) {

**val** callIntent = Intent(Intent.*ACTION\_CALL*)

callIntent.*data* = Uri.parse(**"tel:$**phoneNumber**"**)

startActivity(callIntent)

}

*// Context menu methods*

**override fun** onCreateContextMenu(

menu: ContextMenu?,

v: View?,

menuInfo: ContextMenu.ContextMenuInfo?

) {

**super**.onCreateContextMenu(menu, v, menuInfo)

*menuInflater*.inflate(R.menu.*contact\_context\_menu*, menu)

}

@SuppressLint(**"QueryPermissionsNeeded"**)

**override fun** onContextItemSelected(item: MenuItem): Boolean {

**val** info = item.*menuInfo* **as** AdapterView.AdapterContextMenuInfo

**val** cursor = **listView**.*adapter*.getItem(info.**position**) **as** Cursor

**val** phoneNumber = cursor.getString(cursor.getColumnIndex(ContactsContract.CommonDataKinds.Phone.*NUMBER*))

**val** contactName = cursor.getString(cursor.getColumnIndex(ContactsContract.CommonDataKinds.Phone.*DISPLAY\_NAME*))

**return when** (item.*itemId*) {

R.id.*action\_call* -> {

**if** (ContextCompat.checkSelfPermission(**this**, Manifest.permission.*CALL\_PHONE*) == PackageManager.*PERMISSION\_GRANTED*) {

makeCall(phoneNumber)

} **else** {

ActivityCompat.requestPermissions(**this**, *arrayOf*(Manifest.permission.*CALL\_PHONE*), **REQUEST\_CODE\_CALL\_PHONE**)

}

**true**

}

R.id.*action\_message* -> {

**val** smsIntent = Intent(Intent.*ACTION\_SENDTO*).*apply* **{**

*data* = Uri.parse(**"smsto:$**phoneNumber**"**)

putExtra(**"sms\_body"**, **"Hello $**contactName**"**)

**}**

**if** (smsIntent.resolveActivity(*packageManager*) != **null**) {

startActivity(smsIntent)

}

**true**

}

R.id.*action\_whatsapp* -> {

**try** {

*// Format phone number to international format*

**val** formattedNumber = phoneNumber.*replace*(**" "**, **""**).*replace*(**"-"**, **""**)

**val** whatsappUri = Uri.parse(**"https://api.whatsapp.com/send?phone=$**formattedNumber**"**)

**val** whatsappIntent = Intent(Intent.*ACTION\_VIEW*, whatsappUri).*apply* **{**

setPackage(**"com.whatsapp"**) *// Ensure that the intent is for WhatsApp*

**}**

**if** (whatsappIntent.resolveActivity(*packageManager*) != **null**) {

startActivity(whatsappIntent)

} **else** {

*// Handle case where WhatsApp is not installed*

Toast.makeText(**this**, **"WhatsApp not installed"**, Toast.*LENGTH\_SHORT*).show()

*// Redirect to Play Store to install WhatsApp*

*// val playStoreIntent = Intent(Intent.ACTION\_VIEW, Uri.parse("market://details?id=com.whatsapp"))*

*// startActivity(playStoreIntent)*

}

} **catch** (e: Exception) {

e.printStackTrace()

Toast.makeText(**this**, **"Error opening WhatsApp"**, Toast.*LENGTH\_SHORT*).show()

}

**true**

}

**else** -> **super**.onContextItemSelected(item)

}

}

}

ADDCONTACACTIVITY.KT:=

**class** AddContactActivity : AppCompatActivity() {

**override fun** onCreate(savedInstanceState: Bundle?) {

**super**.onCreate(savedInstanceState)

setContentView(R.layout.*activity\_add\_contact*)

**val** addButton: Button = findViewById(R.id.*add\_contact\_button*)

addButton.setOnClickListener **{**

*// Create an intent to insert a new contact*

**val** intent = Intent(Intent.*ACTION\_INSERT*)

intent.*type* = ContactsContract.Contacts.*CONTENT\_TYPE*

*// Optional: Add initial data to the contact*

intent.putExtra(ContactsContract.Intents.Insert.*NAME*, **"New Contact"**)

intent.putExtra(ContactsContract.Intents.Insert.*PHONE*, **"1234567890"**)

startActivity(intent)

**}**

}

}

.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"**>

<**SearchView**

**android:id="@+id/search\_view"**

**android:layout\_width="0dp"**

**android:layout\_height="wrap\_content"**

**android:layout\_margin="16dp"**

**app:layout\_constraintTop\_toTopOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**/>

<**ListView**

**android:id="@+id/listview"**

**android:layout\_width="0dp"**

**android:layout\_height="0dp"**

**app:layout\_constraintTop\_toBottomOf="@id/search\_view"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**/>

<**com.google.android.material.floatingactionbutton.FloatingActionButton**

**android:id="@+id/btn\_add"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_margin="16dp"**

**android:src="@android:drawable/ic\_menu\_add"**

**android:contentDescription="Add Content"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"** />

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

ADD\_CONTACT.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"**

**android:padding="16dp"**>

<**Button**

**android:id="@+id/add\_contact\_button"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="Add Contact"** />

</**LinearLayout**>