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Reg. No. – 16BCE0901

Course Name – Mobile Application Development

Course Code – ITE1016

Slot – B1 + TB1

DIGITAL ASSIGNMENT -1

Main Application –

(i) Android Manifest File -

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    package="com.example.akshatapp">

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

    <application
        android:allowBackup="true"
        android:icon="@mipmap/hhh"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity
            android:name=".activities.testdrawer"
            android:label="@string/title_activity_testdrawer"
            android:theme="@style/AppTheme.NoActionBar">

        </activity>
        <activity android:name=".activities.NewRecord" />
        <activity android:name=".activities.candidateslist" />
        <activity android:name=".activities.Display" />
        <activity android:name=".activities.implicitintent">


        </activity>
        <activity android:name=".activities.Login" />
        <activity android:name=".activities.Welcome">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

(ii) Main Activity Design (XML)

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.drawerlayout.widget.DrawerLayout
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:id="@+id/drawer_layout"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:fitsSystemWindows="true"
    tools:openDrawer="start">

    <include
        layout="@layout/app_bar_testdrawer"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />


    <com.google.android.material.navigation.NavigationView
        android:id="@+id/nav_view"
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        android:layout_gravity="start"
        android:fitsSystemWindows="true"
        app:headerLayout="@layout/nav_header_testdrawer"
        app:menu="@menu/activity_testdrawer_drawer" />

</androidx.drawerlayout.widget.DrawerLayout>
```

(iii) Side Menu Design (XML)

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



    <item android:title="Digital Assignment 1">
        <menu>
            <group android:checkableBehavior="single">
            <item
                android:id="@+id/ques1"
                android:icon="@drawable/ic_menu_send"
                android:title="Question 1" />
            <item
                android:id="@+id/ques2"
                android:icon="@drawable/ic_menu_send"
                android:title="Question 2" />
            <item
                android:id="@+id/ques3"
                android:icon="@drawable/ic_menu_send"
                android:title="Question 3" />
            <item
                android:id="@+id/ques4"
                android:icon="@drawable/ic_menu_send"
                android:title="Question 4" />
            </group>
        </menu>
    </item>
```

```
</menu>
```

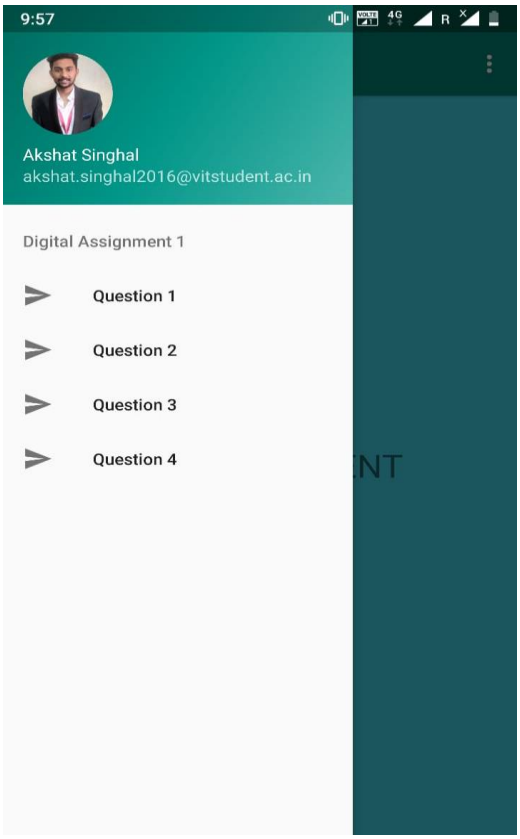
(iv) Main Activity Code – (testdrawer.java)

```
package com.example.akshatapp.activities;

import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;

import androidx.appcompat.app.ActionBarDrawerToggle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.widget.Toolbar;
import androidx.core.view.GravityCompat;
import androidx.drawerlayout.widget.DrawerLayout;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;

import com.example.akshatapp.Fragments.adduserfragment;
import com.example.akshatapp.Fragments.candidateslistfragment;
import com.example.akshatapp.Fragments.chatfragment;
import com.example.akshatapp.Fragments.detailsfragment;
import com.example.akshatapp.Fragments.loginfragment;
import com.example.akshatapp.Fragments.recyclerfragment;
import com.example.akshatapp.R;
import com.google.android.material.navigation.NavigationView;

public class testdrawer extends AppCompatActivity
        implements chatfragment.OnFragmentInteractionListener,
        adduserfragment.OnadduserFragmentInteractionListener,
        loginfragment.onLoginFragmentInteractionListener,
        NavigationView.OnNavigationItemSelectedListener {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_testdrawer);
        Toolbar toolbar = findViewById(R.id.toolbar);
        setSupportActionBar(toolbar);
        setTitle("Digital Assignment 1");

        DrawerLayout drawer = findViewById(R.id.drawer_layout);
        NavigationView navigationView = findViewById(R.id.nav_view);
        ActionBarDrawerToggle toggle = new ActionBarDrawerToggle(
                this, drawer, toolbar, R.string.navigation_drawer_open,
R.string.navigation_drawer_close);
        drawer.addDrawerListener(toggle);
        toggle.syncState();
        navigationView.setNavigationItemSelectedListener(this);


        Fragment frag = new chatfragment();
        FragmentManager fragmentManager = getSupportFragmentManager();
        FragmentTransaction fragmentTransaction = fragmentManager.beginTransaction();
        fragmentTransaction.replace(R.id.framecontainer,frag);
        fragmentTransaction.commit();
    }

    @Override
    public void onBackPressed() {
```

```
    DrawerLayout drawer = findViewById(R.id.drawer_layout);
    if (drawer.isDrawerOpen(GravityCompat.START)) {
        drawer.closeDrawer(GravityCompat.START);
    } else {
        super.onBackPressed();
    }
}

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    super.onCreateOptionsMenu(menu);
    getMenuInflater().inflate(R.menu.testdrawer, menu);
    return true;
}

@Override
public boolean onOptionsItemSelected(MenuItem item) {
    // Handle action bar item clicks here. The action bar will
    // automatically handle clicks on the Home/Up button, so long
    // as you specify a parent activity in AndroidManifest.xml.
    int id = item.getItemId();

    //noinspection SimplifiableIfStatement
    if (id == R.id.action_settings) {
        return true;
    }

    return super.onOptionsItemSelected(item);
}

@Override
public boolean onNavigationItemSelected(MenuItem item) {

    int id = item.getItemId();

    if(id==R.id.ques1)
    {
        Intent it = new Intent(testdrawer.this,Welcome.class);
        startActivity(it);
        finish();
    }
    else if(id==R.id.ques2)
    {
        Fragment fr = new candidateslistfragment();
        getSupportFragmentManager()
                .beginTransaction()
                .replace(R.id.framecontainer,fr)
                .commit();
    }
    else if(id==R.id.ques3)
    {
        Fragment fr = new detailsfragment();
        getSupportFragmentManager()
                .beginTransaction()
                .replace(R.id.framecontainer,fr)
                .commit();
    }
    else if(id==R.id.ques4)
    {
        Fragment fr = new recyclerfragment();
        getSupportFragmentManager()
                .beginTransaction()
                .replace(R.id.framecontainer,fr)
                .commit();
    }
```

```
        DrawerLayout drawer = findViewById(R.id.drawer_layout);
        drawer.closeDrawer(GravityCompat.START);
        return true;
    }

    @Override
    public void onFragmentInteraction(Uri uri) {

    }

    @Override
    public void onadduserFragmentInteraction(Uri uri) {

    }

    @Override
    public void onLoginFragmentInteraction(Uri uri)
    {

    }


}
```

(v) Output



Question 1 – Splash Activity

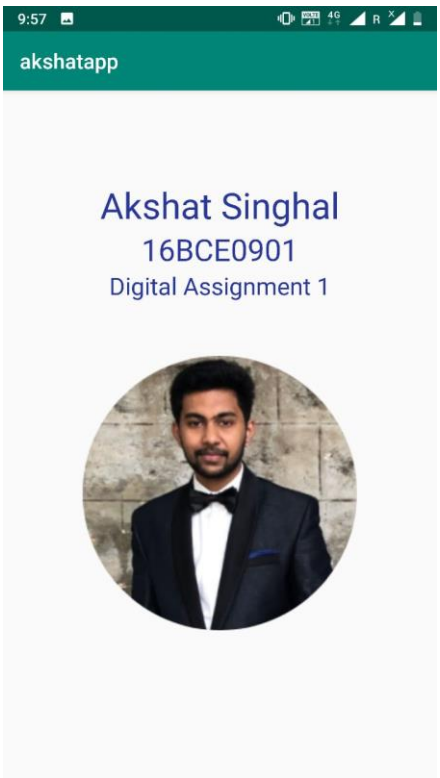
(i) Design (XML) –

```
<?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:id="@+id/relativeLayout"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".activities.Welcome">

    <TextView
        android:id="@+id/main_text"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="300px"
        android:text="Akshat Singhal"
        android:textAlignment="center"
        android:textColor="#283799"
        android:textSize="120px"
        />

    <TextView
        android:id="@+id/reg_no"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="16BCE0901"
        android:textAlignment="center"
        android:textColor="#283799"
        android:textSize="100px"
        />

    <TextView
        android:id="@+id/da1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Digital Assignment 1"
        android:textAlignment="center"
        android:textColor="#283799"
        android:textSize="80px"

        />


    <ImageView
        android:id="@+id/imageView2"
        android:layout_width="265dp"
        android:layout_height="260dp"
        android:layout_gravity="center"
        android:layout_marginTop="180px"
        android:src="@mipmap/profile_round"

        />

</LinearLayout>
```

(ii) Code –

```
package com.example.akshatapp.activities;

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

import androidx.appcompat.app.AppCompatActivity;

import com.example.akshatapp.R;

import java.util.Timer;
import java.util.TimerTask;

public class Welcome extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_welcome);
        ProgressBar p1;
        Timer t = new Timer();
        t.schedule(new TimerTask() {
            @Override
            public void run() {
                Intent intent = new Intent(Welcome.this,testdrawer.class);
                startActivity(intent);
                finish();
            }
        },3000);
    }
}
```

(iii) Output –



Question 2 – Swipe Functionality

(i) Design (XML) –

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


<androidx.core.widget.NestedScrollView xmlns:app="http://schemas.android.com/apk/res-
auto"
    android:layout_height="match_parent"
    android:layout_width="match_parent"
    android:fillViewport="true"
    xmlns:android="http://schemas.android.com/apk/res/android">

    <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=".activities.candidateslist"
        android:id="@+id/row"
        android:orientation="vertical">

        <!--<ImageView-->
            <!--android:layout_width="match_parent"-->
            <!--android:layout_height="64dp"-->
            <!--app:srcCompat="@mipmap/insta" />-->

        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Question 2"
            android:textColor="#000000"
            android:textSize="30dp"
            android:textAlignment="center"
            android:textStyle="bold"
            android:paddingBottom="25px"

            />
        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="**  Swipe right to delete  **"
            android:textColor="#ff0000"
            android:paddingTop="10px"
            android:paddingBottom="10px"
            android:textAlignment="center"
            />

        <ListView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:entries="@array/candidates"
            android:id="@+id/candidates_list"
            android:layout_marginTop="50px"
            >
        </ListView>
```

```
    </LinearLayout>

</androidx.core.widget.NestedScrollView>
```

(ii) Code –

1. Main Fragment

```
package com.example.akshatapp.Fragments;

import android.content.Intent;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.net.Uri;
import android.os.Bundle;
import android.util.Log;
import android.view.LayoutInflater;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.view.View;
import android.view.ViewGroup;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.ImageButton;
import android.widget.ImageView;
import android.widget.ListView;
import android.widget.TextView;
import android.widget.Toast;

import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;
import androidx.fragment.app.Fragment;

import com.example.akshatapp.R;
import com.example.akshatapp.activities.NewRecord;
import com.example.akshatapp.activities.testdrawer;
import com.example.akshatapp.listeners.OnSwipeTouchListener;

import java.io.File;
import java.util.ArrayList;
import java.util.Timer;
import java.util.TimerTask;

import static android.app.Activity.RESULT_OK;
import static android.content.Context.MODE_PRIVATE;
import static android.content.Intent.ACTION_VIEW;

class myAdapter extends ArrayAdapter<String>
{
    private ArrayList<Integer> imgid;
    private AppCompatActivity context;
    private ArrayList<String> instanames,names,fbnames;
    public myAdapter(AppCompatActivity context, ArrayList<String> names,
ArrayList<String> instanames, ArrayList<String> fbnames, ArrayList<Integer> imgid)
    {
        super(context,R.layout.candidate_custom,names);
        this.imgid = imgid;
        this.context = context;
        this.instanames = instanames;
        this.fbnames = fbnames;
        this.names = names;
```

```
    }

    public View getView(int position, View convertView, ViewGroup parent) {

        View rowView;
        LayoutInflater inflater = context.getLayoutInflater();
        rowView = inflater.inflate(R.layout.candidate_custom,null,true);
        TextView name = (TextView) rowView.findViewById(R.id.namecustom);
        final TextView fbi = (TextView)rowView.findViewById(R.id.fb);
        final TextView insta = (TextView) rowView.findViewById(R.id.nameinsta);
        ImageView img = (ImageView) rowView.findViewById(R.id.imgcustom);
        ImageButton btninsta = (ImageButton)rowView.findViewById(R.id.btninsta);
        ImageButton btnfb = (ImageButton)rowView.findViewById(R.id.btnfb);

        btninsta.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent in = new Intent(ACTION_VIEW);
                String url =
"https://www.instagram.com/"+insta.getText().toString()+"/";
                in.setData(Uri.parse(url));
                context.startActivity(in);
            }
        });
        btnfb.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent in = new Intent(ACTION_VIEW);
                String url = "https://www.facebook.com/"+fbi.getText().toString()+"/";
                in.setData(Uri.parse(url));
                context.startActivity(in);
            }
        });
        name.setText(names.get(position));
        insta.setText(instanames.get(position));
        img.setImageResource(imgid.get(position));
        fbi.setText(fbnames.get(position));
        return rowView;

    }

    @Override
    public int getCount() {
        return names.size();
    }
}

public class candidateslistfragment extends Fragment {
    // TODO: Rename parameter arguments, choose names that match
    // the fragment initialization parameters, e.g. ARG_ITEM_NUMBER
    private static final String ARG_PARAM1 = "param1";
    private static final String ARG_PARAM2 = "param2";
    ArrayList<String> names = new ArrayList<String>();
    ArrayList<String> nicknames = new ArrayList<String>();
    ArrayList<String> fbnames = new ArrayList<String>();
    ArrayList<Integer> imgid = new ArrayList<Integer>();
    ArrayList<Integer> ide = new ArrayList<Integer>();
    ListView lv;
    Button insert;
    SQLiteDatabase db = null;

    // TODO: Rename and change types of parameters
    private String mParam1;
    private String mParam2;

    public candidateslistfragment() {
        setHasOptionsMenu(true);
```

```
        // Required empty public constructor
    }

    /**
     * Use this factory method to create a new instance of
     * this fragment using the provided parameters.
     *
     * @param param1 Parameter 1.
     * @param param2 Parameter 2.
     * @return A new instance of fragment candidateslistfragment.
     */
    // TODO: Rename and change types and number of parameters
    public static candidateslistfragment newInstance(String param1, String param2) {
        candidateslistfragment fragment = new candidateslistfragment();
        Bundle args = new Bundle();
        args.putString(ARG_PARAM1, param1);
        args.putString(ARG_PARAM2, param2);
        fragment.setArguments(args);
        return fragment;
    }

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        if (getArguments() != null) {
            mParam1 = getArguments().getString(ARG_PARAM1);
            mParam2 = getArguments().getString(ARG_PARAM2);
        }
    }

    @Override
    public void onCreateOptionsMenu(Menu menu, MenuInflater menuInflater) {
        // Inflate the menu; this adds items to the action bar if it is present.
        menuInflater.inflate(R.menu.navmenu, menu);
        super.onCreateOptionsMenu(menu,menuInflater);
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        switch(item.getItemId())
        {
            case R.id.item1:
                Intent it = new Intent(getActivity(), NewRecord.class);
                startActivityForResult(it,1);
                return true;
            case R.id.item2:
                Toast.makeText(getActivity(),"Item 2 selected",
Toast.LENGTH_SHORT).show();
                Intent a = new Intent(getActivity(), testdrawer.class);
                startActivity(a);
                return true;
            case R.id.item3:
                Toast.makeText(getActivity(),"Item 3
selected",Toast.LENGTH_LONG).show();
                return true;
            case R.id.item4:
                Toast.makeText(getActivity(),"Item 4
selected",Toast.LENGTH_LONG).show();
                return true;
        }
        return false;
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        // Inflate the layout for this fragment
```

```
        View v;
        v = inflater.inflate(R.layout.fragment_candidateslistfragment, container,
false);
        lv = (ListView)v.findViewById(R.id.candidates_list);
        insert = (Button)v.findViewById(R.id.insertnew);
        names.add("Akshat Singhal");
        nicknames.add("akkidarapstar");
        fbnames.add("akkidarapstar");
        ide.add(1);
        imgid.add(R.drawable.ic_sentiment_very_satisfied_black_24dp);
        db = getActivity().openOrCreateDatabase("instagram",MODE_PRIVATE,null);
        File database = getActivity().getDatabasePath("instagram");
        if(database.exists())
        {
            Log.e("DATABASE","Connection Successful");
            //db.execSQL("DROP table users");
//            Toast.makeText(this, "Database is created", Toast.LENGTH_SHORT).show();
        }

        myAdapter adapter = new myAdapter((AppCompatActivity)
getActivity(),names,nicknames,fbnames,imgid);
        lv.setAdapter(adapter);
        lv.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view, int position,
long id) {
                Toast.makeText(getActivity(), names.get(position).toString() + "  --
"+nicknames.get(position).toString(), Toast.LENGTH_SHORT).show();

            }
        });

        lv.setOnTouchListener(new OnSwipeTouchListener(getActivity()) {
            public void onSwipeTop() {
                Toast.makeText(getActivity(), "top", Toast.LENGTH_SHORT).show();
            }
            public void onSwipeRight(int posx,int posy) {
                int position = lv.pointToPosition(posx,posy);
                Toast.makeText(getActivity(), "left to right "+position,
Toast.LENGTH_LONG).show();
                deleteUser(position);
            }
            public void onSwipeLeft(int posx,int posy) {
                int position = lv.pointToPosition(posx,posy);
                Toast.makeText(getActivity(), "right to left "+position,
Toast.LENGTH_LONG).show();
            }
            public void onSwipeBottom() {
                Toast.makeText(getActivity(), "bottom", Toast.LENGTH_SHORT).show();
            }
            public void pos(int a,int b)
            {
                Toast.makeText(getActivity(),""+a+" "+b,Toast.LENGTH_LONG).show();
            }

        });

        createLists();
        return v;
    }

    public void createTable()
    {
        String query = "CREATE TABLE IF NOT EXISTS `users`(id integer primary key
autoincrement, name varchar(100), insta varchar(100),fb varchar(200),profileimg
integer);";
        try
```

```
        {
            db.execSQL(query);
            Toast.makeText(getActivity(), "Table created ",
Toast.LENGTH_SHORT).show();
        }
        catch (Exception e)
        {
            Toast.makeText(getActivity(), e.getMessage().toString(),
Toast.LENGTH_SHORT).show();
        }
    }
    public void insertName(String name,String instaname,String fbname)
    {
        String query = "INSERT into `users`(`name`,`insta`,`fb`,`profileimg`)
values('"+name+"','"+instaname+"','"+fbname+"',"+R.drawable.ic_sentiment_very_satisfie
d_black_24dp+")";
        try
        {
            db.execSQL(query);
            Toast.makeText(getActivity(), "Record inserted Succesfully",
Toast.LENGTH_SHORT).show();
        }
        catch(Exception e)
        {

Toast.makeText(getActivity(),e.getMessage().toString(),Toast.LENGTH_LONG).show();
        }
    }

    public void deleteUser(int pos)
    {
        int id = ide.get(pos);
        String named = names.get(pos);
        String sql = "DELETE from `users` where `id`="+id;
        try {
        db.execSQL(sql);
        Toast.makeText(getActivity(), "Deleting  - "+named, Toast.LENGTH_LONG).show();


            Timer t = new Timer();
            t.schedule(new TimerTask() {
                @Override
                public void run() {
                    Fragment fr = new candidateslistfragment();
                    getActivity().getSupportFragmentManager()
                            .beginTransaction()
                            .replace(R.id.framecontainer,fr)
                            .commit();
                }
            },3000);
        }
        catch (Exception e)
        {
            e.printStackTrace();
        }

    }


    public void createLists()
    {
        Cursor cursor = db.rawQuery("select * from users;",null);
        cursor.moveToFirst();
        int idcolumn = cursor.getColumnIndex("id");
        int namecolumn = cursor.getColumnIndex("name");
        int instanamecolumn = cursor.getColumnIndex("insta");
        int fbnamecolumn = cursor.getColumnIndex("fb");
```

```
        int imgidf= cursor.getColumnIndex("profileimg");
        if((cursor!=null) && (cursor.getCount()>0))
        {
            ide.clear();
            names.clear();
            nicknames.clear();
            imgid.clear();
            fbnames.clear();
            do {
                ide.add(cursor.getInt(idcolumn));
                names.add(cursor.getString(namecolumn));
                nicknames.add(cursor.getString(instanamecolumn));
                imgid.add(cursor.getInt(imgidf));
                fbnames.add(cursor.getString(fbnamecolumn));

            }while (cursor.moveToNext());
        }
    }

    @Override
    public void onActivityResult(int requestCode, int resultCode, @Nullable Intent
data) {
        super.onActivityResult(requestCode, resultCode, data);
        if (requestCode == 1 && resultCode == RESULT_OK) {
            String name = data.getStringExtra("newname");
            String instaname = data.getStringExtra("newinstaname");
            String fbname = data.getStringExtra("newfbname");
            Toast.makeText(getActivity(), name + " --- " + instaname,
Toast.LENGTH_LONG).show();
            insertName(name, instaname, fbname);
            createLists();
        }
    }

    // TODO: Rename method, update argument and hook method into UI event

}
```

2. OnTouchListener (For Gesture detection)

```
package com.example.akshatapp.listeners;

import android.content.Context;
import android.view.GestureDetector;
import android.view.GestureDetector.SimpleOnGestureListener;
import android.view.MotionEvent;
import android.view.View;
import android.view.View.OnTouchListener;

public class OnSwipeTouchListener implements OnTouchListener {

    int posx,posy;
    private final GestureDetector gestureDetector;

    public OnSwipeTouchListener (Context ctx){
        gestureDetector = new GestureDetector(ctx, new GestureListener());
    }

    @Override
    public boolean onTouch(View v, MotionEvent event) {
        posx = (int)event.getX();
        posy = (int)event.getY();
        return gestureDetector.onTouchEvent(event);
    }
```

```
    private final class GestureListener extends SimpleOnGestureListener {

        private static final int SWIPE_THRESHOLD = 10;
        private static final int SWIPE_VELOCITY_THRESHOLD = 10;

        @Override
        public boolean onDown(MotionEvent e) {
            return true;
        }

        @Override
        public boolean onFling(MotionEvent e1, MotionEvent e2, float velocityX, float
velocityY) {
            boolean result = false;
            try {
                float diffY = e2.getY() - e1.getY();
                float diffX = e2.getX() - e1.getX();
                if (Math.abs(diffX) > 0) {

                    if (diffX > 0) {
                        onSwipeRight(posx,posy);
                    } else {
                        onSwipeLeft(posx,posy);
                    }
                    result = true;
                }
            } catch (Exception exception) {
                exception.printStackTrace();
            }
            return result;
        }
    }

    public void ab(float diffX) {

    }
    public void pos(int a,int b)
    {

    }

    public void onSwipeRight(int posx,int posy) {
    }

    public void onSwipeLeft(int posx,int posy) {
    }

    public void onSwipeTop() {
    }

    public void onSwipeBottom() {
    }
}
```

(iii) Output –


9:58
Digital Assignment 1
Question 2
** Swipe right to delete **
Akshat singhal
akkidarapstar
Suyash mishra
suyash98
Rakshit Sinha
raxitsinha


9:58
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Deleting - Rakshit Sinha


9:58
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Akshat singhal
akkidarapstar
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suyash98

Question 3 – Card View

(i) Design (XML) –

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

<androidx.cardview.widget.CardView
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"

    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    app:cardCornerRadius="5dp"
    android:layout_marginTop="10px"
    app:cardElevation="15dp"
    android:paddingLeft="5dp"
    android:paddingRight="5dp"
    android:layout_margin="5dp">



    <LinearLayout
        android:id="@+id/cardlayout"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="horizontal"
        >

        <ImageView
            android:layout_width="80dp"
            android:layout_height="80dp"
            android:src="@mipmap/profile_round"
            android:layout_marginLeft="3px"
            android:layout_gravity="center"
            android:id="@+id/profile_pic"
            />
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="vertical"
            android:weightSum="2"
            android:layout_gravity="center"
            android:padding="10px"
            >

            <TextView
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:text="Akshat Singhal"
                android:layout_weight="1"
                android:layout_gravity="center"
                android:id="@+id/main_name"
                android:textAlignment="center"
                android:textColor="#000000"
                android:padding="15px"
                />

            <TextView
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:text="akshat.singhal2016@vitstudent.com"
                android:layout_weight="1"
                android:textAlignment="center"
```

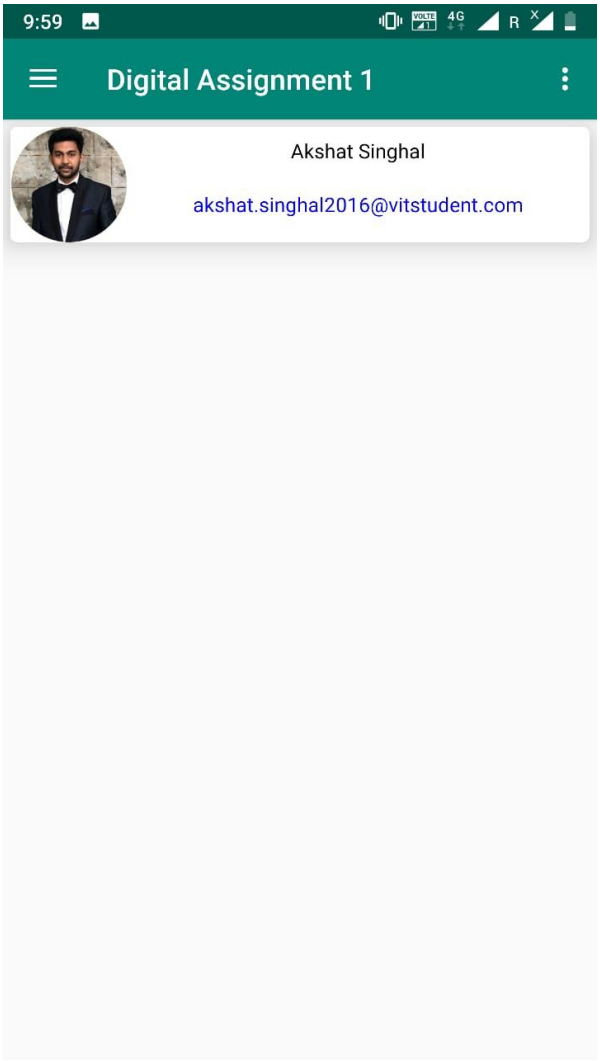
```
                android:layout_gravity="center"
                android:textColor="#0000ff"
                android:id="@+id/main_email"
                android:padding="15px"
                />

        </LinearLayout>

    </LinearLayout>

</androidx.cardview.widget.CardView>
```

(ii) Code –

```
package com.example.akshatapp.Fragments;

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

import androidx.fragment.app.Fragment;

import com.example.akshatapp.R;

public class detailsfragment extends Fragment {
    // TODO: Rename parameter arguments, choose names that match
    // the fragment initialization parameters, e.g. ARG_ITEM_NUMBER
    private static final String ARG_PARAM1 = "param1";
    private static final String ARG_PARAM2 = "param2";

    // TODO: Rename and change types of parameters
    private String mParam1;
    private String mParam2;


    public detailsfragment() {

    }

    // TODO: Rename and change types and number of parameters
    public static detailsfragment newInstance(String param1, String param2) {
        detailsfragment fragment = new detailsfragment();
        Bundle args = new Bundle();
        args.putString(ARG_PARAM1, param1);
        args.putString(ARG_PARAM2, param2);
        fragment.setArguments(args);
        return fragment;
    }

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        if (getArguments() != null) {
            mParam1 = getArguments().getString(ARG_PARAM1);
            mParam2 = getArguments().getString(ARG_PARAM2);
        }
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {

        return inflater.inflate(R.layout.fragment_detailsfragment, container, false);
```

```
    }
}
```

(iii) Output –



Question 4 – Recycler View

(i) Design –

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

```
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Question 4"
        android:textColor="#000000"
        android:textSize="30dp"
        android:textAlignment="center"
        android:textStyle="bold"
        android:paddingBottom="25px"

        />

    <androidx.recyclerview.widget.RecyclerView android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/recycler_view"
        android:scrollbars="vertical"
        tools:context=".Fragments.recyclerfragment">



    </androidx.recyclerview.widget.RecyclerView>
</LinearLayout>
```

(ii) Code –

```
package com.example.akshatapp.Fragments;

import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.LinearLayout;
import android.widget.TextView;

import androidx.annotation.NonNull;
import androidx.fragment.app.Fragment;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;

import com.example.akshatapp.R;
import com.google.android.material.snackbar.Snackbar;


class MyRecyclerAdapter extends RecyclerView.Adapter<MyRecyclerAdapter.ViewHolder>
{
    private String[] names,emails;
    public int[] profile;
    public MyRecyclerAdapter(String[] names,String[] emails,int[] profile)
    {
        this.names = names;
        this.emails = emails;
        this.profile = profile;
    }

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

        LayoutInflater layoutInflater = LayoutInflater.from(parent.getContext());
        View rowView = (View)
layoutInflater.inflate(R.layout.fragment_detailsfragment,parent,false);
        ViewHolder vh= new ViewHolder(rowView);
        return vh;
```

```
    }

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

        holder.main_name.setText(names[position]);
        holder.main_email.setText(emails[position]);
        holder.profile_pic.setImageResource(profile[position]);
        holder.cardlayout.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                //Toast.makeText(v.getContext(), "Name : "+names[position]+"\nEmail :
"+emails[position], Toast.LENGTH_LONG).show();
                Snackbar.make(v,"Name : "+names[position]+"\nEmail :
"+emails[position],Snackbar.LENGTH_LONG).show();
            }
        });

    }
    @Override
    public int getItemCount() {
        return names.length;
    }

    public class ViewHolder extends RecyclerView.ViewHolder {

        public TextView main_name,main_email;
        public LinearLayout cardlayout;
        public ImageView profile_pic;
        public ViewHolder(@NonNull View itemView) {
            super(itemView);
            this.cardlayout = (LinearLayout)itemView.findViewById(R.id.cardlayout);
            this.main_email = (TextView)itemView.findViewById(R.id.main_email);
            this.main_name = (TextView)itemView.findViewById(R.id.main_name);
            this.profile_pic = (ImageView)itemView.findViewById(R.id.profile_pic);
        }
    }
}



public class recyclerfragment extends Fragment {

    private static final String ARG_PARAM1 = "param1";
    private static final String ARG_PARAM2 = "param2";
    String[] name = {"Akshat Singhal","Raj Shukla","Himal Kumar Singh","Rakshit
Sinha"};
    String[] email =
{"akshat.singhal2016@vitstudent.ac.in","raj.shukla2016@vitstudent.ac.in","himalkumar.s
ingh@vitstudent.ac.in","rakshit.sinha2016@vitstudent.ac.in"};
    int[] profile = {R.mipmap.profile,R.mipmap.raj,R.mipmap.himal,R.mipmap.rakshit};

    // TODO: Rename and change types of parameters
    private String mParam1;
    private String mParam2;

    public recyclerfragment() {

    }

    public static recyclerfragment newInstance(String param1, String param2) {
        recyclerfragment fragment = new recyclerfragment();
        Bundle args = new Bundle();
        args.putString(ARG_PARAM1, param1);
        args.putString(ARG_PARAM2, param2);
        fragment.setArguments(args);
        return fragment;
```

```
    }

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        if (getArguments() != null) {
            mParam1 = getArguments().getString(ARG_PARAM1);
            mParam2 = getArguments().getString(ARG_PARAM2);
        }
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        // Inflate the layout for this fragment;
        View v = inflater.inflate(R.layout.fragment_recyclerfragment, container,
false);
        RecyclerView recyclerView = (RecyclerView)v.findViewById(R.id.recycler_view);
        MyRecyclerAdapter adapter = new MyRecyclerAdapter(name,email,profile);
        recyclerView.setHasFixedSize(true);
        recyclerView.setLayoutManager(new LinearLayoutManager(getActivity()));
        recyclerView.setAdapter(adapter);
        return v;
    }
}
```

(iii) Output –