Slip 1

**Q1)** Write an application to create a splash screen.

Ans.

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

<RelativeLayout

xmlns:android="http://schemas.android.com/apk/res/android" xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:background="@color/white" tools:context=".MainActivity">

<ImageView

android:id="@+id/imageview1" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:src="@drawable/ic\_launcher\_background" android:layout\_centerInParent="true" />

<ImageView android:id="@+id/imageView" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:src="@drawable/ic\_launcher\_foreground" android:layout\_centerInParent="true" />

</RelativeLayout>

MainActivity.java-

package com.example.myapplication;

import android.os.Bundle;

import android.content.Intent; import android.os.Bundle; import android.os.Handler;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

private static final int SPLASH\_TIME\_OUT = 3000;

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

new Handler().postDelayed(new Runnable() {

@Override

public void run() {

// Start the MainActivity after SPLASH\_TIME\_OUT milliseconds

Intent mainIntent = new Intent(MainActivity.this, MainActivity.class);

startActivity(mainIntent); finish(); // close this activity

}

}, SPLASH\_TIME\_OUT);

}

}

**Q2)** Create table Student (roll\_no, name, address, percentage). Create Application for performing the following operation on the table. (Using SQLite database).

1. Insert record of 5 new student details.
2. Show all the student details.

Ans.

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

<RelativeLayout

xmlns:android="http://schemas.android.com/apk/res/android" xmlns:app="http://schemas.android.com/apk/res-auto" xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:padding="10dp" tools:context=".MainActivity">

<TextView android:id="@+id/texttitle" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Please enter the details below" android:textSize="24dp" android:layout\_marginTop="20dp"/>

<EditText android:id="@+id/name" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="Name" android:textSize="24dp" android:layout\_below="@+id/texttitle" android:inputType="textPersonName"/>

<EditText android:id="@+id/contact" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="Contact" android:textSize="24dp" android:layout\_below="@+id/name" android:inputType="number"/>

<EditText android:id="@+id/dob" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="Date of Birth" android:textSize="24dp" android:layout\_below="@+id/contact" android:inputType="number"/>

<Button android:id="@+id/btnInsert" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:textSize="24dp" android:text="Insert New Data" android:layout\_marginTop="30dp" android:layout\_below="@id/dob"/>

<Button

android:id="@+id/btnUpdate" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:textSize="24dp" android:text="Update Data" android:layout\_below="@id/btnInsert"/>

<Button

android:id="@+id/btnDelete" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:textSize="24dp" android:text="Delete Existing Data" android:layout\_below="@id/btnUpdate"/>

<Button

android:id="@+id/btnView" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:textSize="24dp" android:text="View Data" android:layout\_below="@id/btnDelete"/>

</RelativeLayout>

**DatabaseHelper.java- package** com.example.myapplication; import android.content.ContentValues; import android.content.Context; import android.database.Cursor; import android.database.sqlite.SQLiteDatabase; import android.database.sqlite.SQLiteOpenHelper;

import androidx.annotation.Nullable; public class DatabaseHelper extends SQLiteOpenHelper { public DatabaseHelper(Context context) { super(context, "Userdata.db", null, 1);

}

@Override public void onCreate(SQLiteDatabase DB) {

DB.execSQL("create Table Userdetails(name TEXT primary key, contact TEXT, dob TEXT)");

}

@Override public void onUpgrade(SQLiteDatabase DB, int i, int ii) {

DB.execSQL("drop Table if exists Userdetails");

}

public Boolean insertuserdata(String name, String contact, String dob)

{

SQLiteDatabase DB = this.getWritableDatabase(); ContentValues contentValues = new ContentValues(); contentValues.put("name", name); contentValues.put("contact", contact); contentValues.put("dob", dob);

long result=DB.insert("Userdetails", null, contentValues);

if(result==-1){ return false; }else{ return true;

}

}

public Boolean updateuserdata(String name, String contact, String dob)

{

SQLiteDatabase DB = this.getWritableDatabase(); ContentValues contentValues = new ContentValues(); contentValues.put("contact", contact); contentValues.put("dob", dob);

Cursor cursor = DB.rawQuery("Select \* from Userdetails where name = ?", new String[]{name});

if (cursor.getCount() > 0) {

long result = DB.update("Userdetails", contentValues,

"name=?", new String[]{name});

if (result == -1) { return false;

} else { return true;

}

} else { return false;

}

}

public Boolean deletedata (String name)

{

SQLiteDatabase DB = this.getWritableDatabase();

Cursor cursor = DB.rawQuery("Select \* from Userdetails where name = ?", new String[]{name}); if (cursor.getCount() > 0) {

long result = DB.delete("Userdetails", "name=?", new String[]{name});

if (result == -1) { return false;

} else { return true;

}

} else { return false;

}

}

public Cursor getdata ()

{

SQLiteDatabase DB = this.getWritableDatabase();

Cursor cursor = DB.rawQuery("Select \* from Userdetails", null);

return cursor;

}

}

**MainActivity.java-**

package com.example.myapplication;

import androidx.appcompat.app.AlertDialog;

import androidx.appcompat.app.AppCompatActivity; import android.database.Cursor; import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.EditText; import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

EditText name, contact, dob;

Button insert, update, delete, view;

DatabaseHelper DB;

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

name = findViewById(R.id.name); contact = findViewById(R.id.contact); dob = findViewById(R.id.dob); insert = findViewById(R.id.btnInsert); update = findViewById(R.id.btnUpdate); delete = findViewById(R.id.btnDelete); view = findViewById(R.id.btnView); DB = new DatabaseHelper(this); insert.setOnClickListener(new View.OnClickListener() {

@Override public void onClick(View view) {

String nameTXT = name.getText().toString();

String contactTXT = contact.getText().toString();

String dobTXT = dob.getText().toString();

Boolean checkinsertdata =

DB.insertuserdata(nameTXT, contactTXT, dobTXT);

if(checkinsertdata==true)

Toast.makeText(MainActivity.this, "New Entry Inserted", Toast.LENGTH\_SHORT).show();

else

Toast.makeText(MainActivity.this, "New Entry Not

Inserted", Toast.LENGTH\_SHORT).show();

} });

update.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String nameTXT = name.getText().toString();

String contactTXT = contact.getText().toString();

String dobTXT = dob.getText().toString();

Boolean checkupdatedata =

DB.updateuserdata(nameTXT, contactTXT, dobTXT);

if(checkupdatedata==true)

Toast.makeText(MainActivity.this, "Entry Updated", Toast.LENGTH\_SHORT).show();

else

Toast.makeText(MainActivity.this, "New Entry Not Updated", Toast.LENGTH\_SHORT).show();

} });

delete.setOnClickListener(new View.OnClickListener() {

@Override public void onClick(View view) {

String nameTXT = name.getText().toString(); Boolean checkudeletedata = DB.deletedata(nameTXT); if(checkudeletedata==true)

Toast.makeText(MainActivity.this, "Entry Deleted", Toast.LENGTH\_SHORT).show();

else

Toast.makeText(MainActivity.this, "Entry Not Deleted", Toast.LENGTH\_SHORT).show();

} });

view.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) { Cursor res = DB.getdata(); if(res.getCount()==0){

Toast.makeText(MainActivity.this, "No Entry Exists", Toast.LENGTH\_SHORT).show();

return;

}

StringBuffer buffer = new StringBuffer(); while(res.moveToNext()){ buffer.append("Name :"+res.getString(0)+"\n");

buffer.append("Contact :"+res.getString(1)+"\n"); buffer.append("Date of Birth :"+res.getString(2)+"\n\n");

}

AlertDialog.Builder builder = new AlertDialog.Builder(MainActivity.this); builder.setCancelable(true); builder.setTitle("User Entries"); builder.setMessage(buffer.toString()); builder.show();

} });

}}