

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).

i] Insert record of 5 new student details.

ii] 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();  
    }    });  
}}
```