

Activity_main.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"
android:background="@drawable/textile" tools:context=".MainActivity">

    <TextView android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="16dp"
        android:layout_marginBottom="42dp"
        android:text="Bill"
        android:textSize="18sp"
        app:layout_constraintBottom_toTopOf="@+id/textView2"
        app:layout_constraintStart_toStartOf="parent" />

    <TextView android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="16dp"
        android:layout_marginBottom="50dp"
        android:text="Name"
        android:textSize="18sp"
        app:layout_constraintBottom_toTopOf="@+id/textView3"
        app:layout_constraintStart_toStartOf="parent" />

    <TextView android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="16dp"
        android:layout_marginBottom="46dp"
        android:text="Phone_no"
        android:textSize="18sp"
        app:layout_constraintBottom_toTopOf="@+id/textView4"
        app:layout_constraintStart_toStartOf="parent" />

    <TextView android:id="@+id/textView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="16dp"
        android:layout_marginBottom="96dp"
        android:text="Purchase_amount"
        android:textSize="18sp"
        app:layout_constraintBottom_toTopOf="@+id/button"
```

```
        app:layout_constraintStart_toStartOf="parent" />

<EditText android:id="@+id/Phone.no"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="24dp"
    android:layout_marginBottom="20dp"
    android:ems="10"
    android:inputType="number"
    app:layout_constraintBottom_toTopOf="@+id/editTextName"
    app:layout_constraintEnd_toEndOf="parent" />

<EditText android:id="@+id/editTextName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="24dp"
    android:layout_marginBottom="28dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toTopOf="@+id/bill"
    app:layout_constraintEnd_toEndOf="parent" />

<EditText android:id="@+id/bill"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="24dp"
    android:layout_marginBottom="24dp"
    android:ems="10" android:inputType="number"
    app:layout_constraintBottom_toTopOf="@+id/purchase"
    app:layout_constraintEnd_toEndOf="parent" />

<EditText android:id="@+id/purchase"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="66dp"
    android:layout_marginEnd="69dp"
    android:layout_marginBottom="98dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toTopOf="@+id/button2"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView4" />

<Button android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="32dp"
    android:layout_marginBottom="28dp" android:text="Add"
    app:layout_constraintBottom_toTopOf="@+id/button3"
    app:layout_constraintStart_toStartOf="parent" />

<Button android:id="@+id/button2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

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        android:layout_marginEnd="132dp"
        android:layout_marginBottom="28dp"
        android:text="View All"
        app:layout_constraintBottom_toTopOf="@+id/button4"
        app:layout_constraintEnd_toEndOf="parent" />

<Button android:id="@+id/button3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="32dp"
        android:layout_marginBottom="52dp"
        android:text="Redeemed"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintStart_toStartOf="parent" />

<Button android:id="@+id/button4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginEnd="132dp"
        android:layout_marginBottom="52dp"
        android:text="Delete"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent" />

<TextView android:id="@+id/textView5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="32dp"
        android:text="Textile shop"
        android:textColor="#3F51B5"
        android:textSize="36sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

Main activity.java:-

```

package com.example.ayeshatextileshop_0101;

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 {
    DatabaseHelper myDb;
    Button ButtonAdd, ButtonView, ButtonUpdate, ButtonDelete;
    EditText Bill;
    EditText name, phone, purchase;

```

```

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main); myDb = new
    DatabaseHelper(this); ButtonAdd =
    findViewById(R.id.button);
    ButtonView = findViewById(R.id.button2);
    ButtonUpdate = findViewById(R.id.button3);
    ButtonDelete = findViewById(R.id.button4);
    Bill = findViewById(R.id.bill); name =
    findViewById(R.id.editTextName); phone =
    findViewById(R.id.Phone_no); purchase =
    findViewById(R.id.purchase); AddData();
    viewAll(); updatedata(); DeleteData();
}

void updatedata() {
    ButtonUpdate.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) { boolean isUpdate =
            myDb.updateData(Bill.getText().toString(),
                name.getText().toString(), phone.getText().toString(),
                purchase.getText().toString());
            if (isUpdate == true)
                Toast.makeText(MainActivity.this, "Data Updated",
                    Toast.LENGTH_LONG).show();
            else
                Toast.makeText(MainActivity.this, "Data not Updated",
                    Toast.LENGTH_LONG).show(); }
    }); }

public void DeleteData() {
    ButtonDelete.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            Integer deletedRows = myDb.deleteData(Bill.getText().toString()); if
            (deletedRows > 0)
                Toast.makeText(MainActivity.this, "Data Deleted",
                    Toast.LENGTH_LONG).show();
            else
                Toast.makeText(MainActivity.this, "Data not Deleted",
                    Toast.LENGTH_LONG).show(); }
    }); }

public void AddData() {
    ButtonAdd.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) { boolean isInserted =
            myDb.insertData(name.getText().toString(),
                phone.getText().toString(),
                purchase.getText().toString());
            if (isInserted == true) {
                Toast.makeText(MainActivity.this, "Data Inserted",
                    Toast.LENGTH_SHORT).show();
            }
        }
    }); }

```

```

        } else {
            Toast.makeText(MainActivity.this, "Data not Inserted",
                Toast.LENGTH_SHORT).show(); }
    }
}); }

public void viewAll() {
    ButtonView.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) { Cursor res =
            myDb.getAllData(); if (res.getCount() == 0) {
                // show message showMessage("Error", "No Data
                Found..."); return;
            }
            StringBuffer buffer = new StringBuffer(); while
            (res.moveToNext()) { buffer.append("Bill :" +
                res.getString(0) + "\n"); buffer.append("Name :" +
                res.getString(1) + "\n"); buffer.append("Phone :" +
                res.getString(2) + "\n"); buffer.append("Purchase :" +
                res.getString(3) + "\n\n");
            }
            // Show all data
            showMessage("Data", buffer.toString()); }
    }); }

public void showMessage(String title, String Message) {
    AlertDialog.Builder builder = new AlertDialog.Builder(this);
    builder.setCancelable(true); builder.setTitle(title);
    builder.setMessage(Message); builder.show();
}
}

```

Databasehelper:-

```

package com.example.ayeshatextileshop_0101;
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 static final String DATABASE_NAME = "shop.db";
    public static final String TABLE_NAME = "Shop_Table";
    public static final String col_1 = "Bill"; public
    static final String col_2 = "NAME"; public static
    final String col_3 = "Phone"; public static final
    String col_4 = "Purchase"; public
    DatabaseHelper(@Nullable Context context) {
        super(context, DATABASE_NAME, null, 1); }
}

```

```

@Override
public void onCreate(SQLiteDatabase db) { db.execSQL("create table
"+TABLE_NAME+ "(Bill INTEGER PRIMARY KEY AUTOINCREMENT,NAME
TEXT,Phone_no INTEGER,Purchase_amount INTEGER)");
}
@Override
public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion)
{ db.execSQL("DROP TABLE IF EXISTS "+TABLE_NAME); onCreate(db);
}
public boolean insertData(String name,String phone,String purchase) {
    SQLiteDatabase db = this.getWritableDatabase();
    ContentValues contentValues = new ContentValues();
    contentValues.put(col_2, name);
    contentValues.put(col_3, phone);
    contentValues.put(col_4, purchase);
    long result = db.insert(TABLE_NAME, null,
    contentValues); if (result == -1) { return false;
    } else {
        return true;
    }
}
public Cursor getAllData()
{
    SQLiteDatabase db = this.getWritableDatabase();
    Cursor res = db.rawQuery("select * from "+TABLE_NAME,null);
    return res;
}
public boolean updateData(String bill,String name,String phone,String purchase) {
    SQLiteDatabase db = this.getWritableDatabase();
    ContentValues contentValues = new ContentValues();
    contentValues.put(col_1,bill);
    contentValues.put(col_2,name);
    contentValues.put(col_3,phone);
    contentValues.put(col_4,purchase);
    db.update(TABLE_NAME, contentValues, "ID = ?",new String[] { bill });
    return true;
}
public Integer deleteData (String id)
{
    SQLiteDatabase db = this.getWritableDatabase();
    return db.delete(TABLE_NAME, "ID = ?",new String[] {id});
}
}

```

Screenshots:-

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help Ayeshatextileshop-0101 - activity_main.xml [Ayeshatextileshop-0101.app] - Android Studio

Ayeshatextileshop0101 app src main res layout activity_main.xml
activity_main.xml MainActivity.java DatabaseHelper.java

1 <?xml version="1.0" encoding="utf-8"?>
2 <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:layout_width="match_parent"
6     android:layout_height="match_parent"
7     android:background="@drawable/textile"
8     tools:context=".MainActivity">
9
10
11     <TextView
12         android:id="@+id/textView"
13         android:layout_width="wrap_content"
14         android:layout_height="wrap_content"
15         android:layout_marginStart="16dp"
16         android:layout_marginBottom="42dp"
17         android:text="@string/bill"
18         android:textSize="18sp"
19         app:layout_constraintBottom_toTopOf="@id/textView2"
20         app:layout_constraintStart_toStartOf="parent" />
21
22     <TextView
23         android:id="@+id/textView2"
24         android:layout_width="wrap_content"
25         android:layout_height="wrap_content"
26
27 </androidx.constraintlayout.widget.ConstraintLayout> </TextView>

TODO Terminal Build Logcat Profiler Database Inspector Run
Success: Operation succeeded (17 minutes ago) Event Log Layout Inspector 24:35 CRLF UTF-8 4 spaces 11:54 AM 12/24/2020
```

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help Ayeshatextileshop-0101 - MainActivity.java [Ayeshatextileshop-0101.app] - Android Studio

example ayeshatextileshop_0101 MainActivity viewAll anonymous OnClickListener onClick
activity_main.xml MainActivity.java DatabaseHelper.java

1 package com.example.ayeshatextileshop_0101;
2
3 import androidx.appcompat.app.AlertDialog;
4 import androidx.appcompat.app.AppCompatActivity;
5 import android.database.Cursor;
6 import android.os.Bundle;
7 import android.view.View;
8 import android.widget.Button;
9 import android.widget.EditText;
10 import android.widget.Toast;
11
12 public class MainActivity extends AppCompatActivity {
13     DatabaseHelper myDb;
14     Button ButtonAdd, ButtonView, ButtonRedeem, ButtonDelete;
15     EditText Phone;
16     EditText name, Bill, Purchase;
17
18     @Override
19     protected void onCreate(Bundle savedInstanceState) {
20         super.onCreate(savedInstanceState);
21         setContentView(R.layout.activity_main);
22         myDb = new DatabaseHelper(this);
23         ButtonAdd = findViewById(R.id.button);
24         ButtonView = findViewById(R.id.button2);
25         ButtonRedeem = findViewById(R.id.button3);
26         ButtonDelete = findViewById(R.id.button4);
27         Phone = findViewById(R.id.phone_no);
28         name = findViewById(R.id.editTextName);
29
30     }
31 }

TODO Terminal Build Logcat Profiler Database Inspector Run
Success: Operation succeeded (17 minutes ago) Event Log Layout Inspector 96:22 CRLF UTF-8 4 spaces 11:54 AM 12/24/2020
```

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help Ayeshatextileshop-0101 - DatabaseHelper.java [Ayeshatextileshop-0101.app] - Android Studio

0101 app src main java com example ayeshatextileshop_0101 col_3
activity_main.xml MainActivity.java DatabaseHelper.java

1 package com.example.ayeshatextileshop_0101;
2 import android.content.ContentValues;
3 import android.content.Context;
4 import android.database.Cursor;
5 import android.database.sqlite.SQLiteDatabase;
6 import android.database.sqlite.SQLiteOpenHelper;
7
8 import androidx.annotation.Nullable;
9
10 public class DatabaseHelper extends SQLiteOpenHelper {
11     public static final String DATABASE_NAME = "shop.db";
12     public static final String TABLE_NAME = "Shop_Table";
13     public static final String col_1 = "Bill";
14     public static final String col_2 = "NAME";
15     public static final String col_3 = "Phone";
16     public static final String col_4 = "Purchase";
17     public DatabaseHelper(@Nullable Context context) { super(context, DATABASE_NAME, factory: null, version: 1); }
18
19     @Override
20     public void onCreate(SQLiteDatabase db) {
21         db.execSQL("create table "+TABLE_NAME+" (Bill INTEGER PRIMARY KEY AUTOINCREMENT,NAME TEXT,Phone_no INTEGER,Purchase_amount INTEGER)");
22     }
23
24     @Override
25     public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
26         db.execSQL("DROP TABLE IF EXISTS "+TABLE_NAME);
27         onCreate(db);
28     }
29
30     public boolean insertData(String name,String phone,String purchase) {
31         SQLiteDatabase db = this.getWritableDatabase();
32         ContentValues contentValues = new ContentValues();
33         contentValues.put("NAME", name);
34         contentValues.put("Phone_no", phone);
35         contentValues.put("Purchase_amount", purchase);
36         long result = db.insert(TABLE_NAME, null, contentValues);
37         return result != -1;
38     }
39 }

TODO Terminal Build Logcat Profiler Database Inspector Run
Success: Operation succeeded (18 minutes ago) Event Log Layout Inspector 15:48 CRLF UTF-8 4 spaces 11:54 AM 12/24/2020
```


