SMD TASK March 4, 2025

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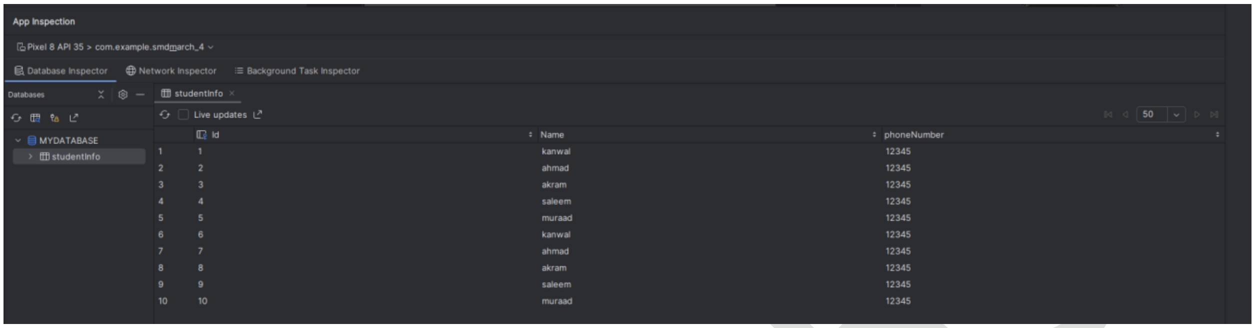
Get app inspection by

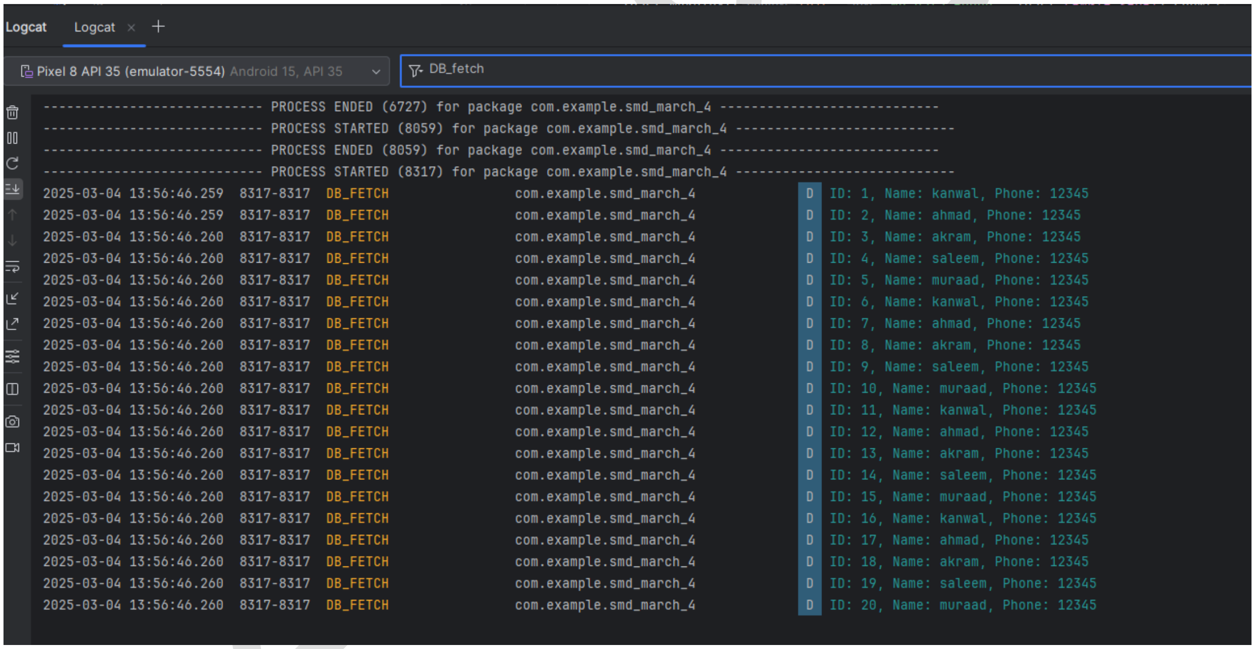
View >tool window >app inspection

Write operation



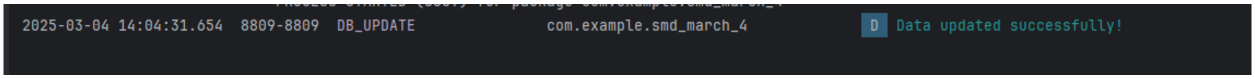
	Id	Name	phoneNumber
1	1	kanwal	12345
2	2	ahmad	12345
3	3	akram	12345
4	4	saleem	12345
5	5	muraad	12345
6	6	kanwal	12345
7	7	ahmad	12345
8	8	akram	12345
9	9	saleem	12345
10	10	muraad	12345

READ operation



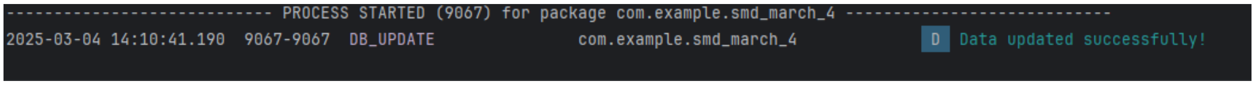
```
--------------------------- PROCESS ENDED (6727) for package com.example.smd_march_4 ---------------------------
--------------------------- PROCESS STARTED (8059) for package com.example.smd_march_4 ---------------------------
--------------------------- PROCESS ENDED (8059) for package com.example.smd_march_4 ---------------------------
--------------------------- PROCESS STARTED (8317) for package com.example.smd_march_4 ---------------------------
2025-03-04 13:56:46.259  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 1, Name: kanwal, Phone: 12345
2025-03-04 13:56:46.259  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 2, Name: ahmad, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 3, Name: akram, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 4, Name: saleem, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 5, Name: muraad, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 6, Name: kanwal, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 7, Name: ahmad, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 8, Name: akram, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 9, Name: saleem, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 10, Name: muraad, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 11, Name: kanwal, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 12, Name: ahmad, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 13, Name: akram, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 14, Name: saleem, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 15, Name: muraad, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 16, Name: kanwal, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 17, Name: ahmad, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 18, Name: akram, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 19, Name: saleem, Phone: 12345
2025-03-04 13:56:46.260  8317-8317  DB_FETCH                com.example.smd_march_4              D  ID: 20, Name: muraad, Phone: 12345
```

UPDATE



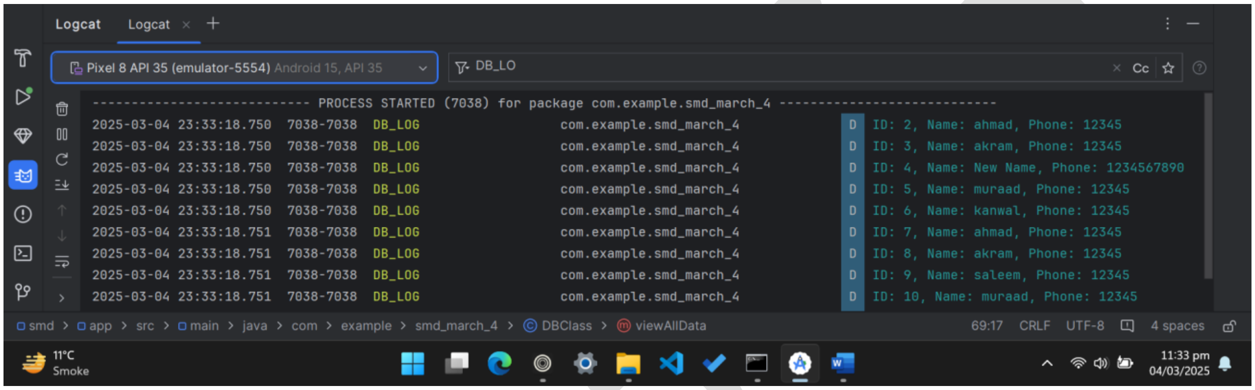
```
2025-03-04 14:04:31.654  8809-8809  DB_UPDATE               com.example.smd_march_4              D  Data updated successfully!
```

Delete



```
---------------------------- PROCESS STARTED (9067) for package com.example.smd_march_4 ----------------------------
2025-03-04 14:10:41.190  9067-9067  DB_UPDATE               com.example.smd_march_4              D  Data updated successfully!
```

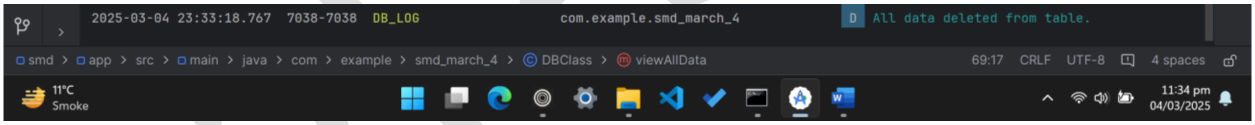
Home task output:



Logcat
Logcat
Pixel 8 API 35 (emulator-5554) Android 15, API 35
DB_LO
Cc
smd > app > src > main > java > com > example > smd_march_4 > DBClass > viewAllData
69:17 CRLF UTF-8 4 spaces
11°C
Smoke
11:33 pm
04/03/2025

```
---------------------------- PROCESS STARTED (7038) for package com.example.smd_march_4 ----------------------------
2025-03-04 23:33:18.750  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 2, Name: ahmad, Phone: 12345
2025-03-04 23:33:18.750  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 3, Name: akram, Phone: 12345
2025-03-04 23:33:18.750  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 4, Name: New Name, Phone: 1234567890
2025-03-04 23:33:18.750  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 5, Name: muraad, Phone: 12345
2025-03-04 23:33:18.750  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 6, Name: kanwal, Phone: 12345
2025-03-04 23:33:18.751  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 7, Name: ahmad, Phone: 12345
2025-03-04 23:33:18.751  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 8, Name: akram, Phone: 12345
2025-03-04 23:33:18.751  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 9, Name: saleem, Phone: 12345
2025-03-04 23:33:18.751  7038-7038  DB_LOG                  com.example.smd_march_4              D  ID: 10, Name: muraad, Phone: 12345
```

After deleting all the data entries



```
2025-03-04 23:33:18.767  7038-7038  DB_LOG                  com.example.smd_march_4              D  All data deleted from table.
```

smd > app > src > main > java > com > example > smd_march_4 > DBClass > viewAllData
69:17 CRLF UTF-8 4 spaces
11°C
Smoke
11:34 pm
04/03/2025

Code file

DBclass java file

```
package com.example.smd_march_4;

import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import android.util.Log;
import androidx.annotation.Nullable;

public class DBClass extends SQLiteOpenHelper {
   private  static final String NAME="MYDATABASE";
   private static final int VERSION=1;
   private static  final String TABLE_NAME="studentInfo";

   private static final String KEY_ID="Id";
   private static final String KEY_NAME="Name";
   private static final String KEY_PHONE_NUMBER="phoneNumber";

   public DBClass(@Nullable Context context) {
      super(context, NAME, null, VERSION);
   }

   @Override
   public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
      db.execSQL("DROP TABLE IF EXISTS " + TABLE_NAME);
      onCreate(db);
   }

   @Override
   public void onCreate(SQLiteDatabase db) {
      String createTableQuery = "CREATE TABLE " + TABLE_NAME + " ( "
            + KEY_ID + " INTEGER PRIMARY KEY AUTOINCREMENT, "
            + KEY_NAME + " TEXT, "
            + KEY_PHONE_NUMBER + " TEXT)";
      db.execSQL(createTableQuery);
   }

   public void addinfo(String name,String Phonenumber){
      SQLiteDatabase database=this.getWritableDatabase();
      ContentValues value=new ContentValues();
      value.put(KEY_NAME,name);
      value.put(KEY_PHONE_NUMBER,Phonenumber);
      database.insert(TABLE_NAME,null,value);
   }

   public Cursor getAllData() {
      SQLiteDatabase database = this.getReadableDatabase();
      return database.rawQuery("SELECT * FROM " + TABLE_NAME, null);
   }
```

```
    public boolean updateData(int id, String name, String phoneNumber) {
        SQLiteDatabase database = this.getWritableDatabase();
        ContentValues values = new ContentValues();
        values.put(KEY_NAME, name);
        values.put(KEY_PHONE_NUMBER, phoneNumber);
        int result = database.update(TABLE_NAME, values, KEY_ID + "=?", new String[]{String.valueOf(id)});
        return result > 0;
    }

    public boolean deleteData(int id) {
        SQLiteDatabase database = this.getWritableDatabase();
        int result = database.delete(TABLE_NAME, KEY_ID + "=?", new String[]{String.valueOf(id)});
        return result > 0;
    }

    // Method to view all database values in logcat
    public void viewAllData() {
        SQLiteDatabase database = this.getReadableDatabase();
        Cursor cursor = database.rawQuery("SELECT * FROM " + TABLE_NAME, null);
        if (cursor.getCount() == 0) {
            Log.d("DB_LOG", "No data found in table.");
        } else {
            while (cursor.moveToNext()) {
                int id = cursor.getInt(0);
                String name = cursor.getString(1);
                String phone = cursor.getString(2);
                Log.d("DB_LOG", "ID: " + id + ", Name: " + name + ", Phone: " + phone);
            }
        }
        cursor.close();
    }

    // Method to delete all table data without deleting the table
    public void deleteAllData() {
        SQLiteDatabase database = this.getWritableDatabase();
        database.delete(TABLE_NAME, null, null);
        Log.d("DB_LOG", "All data deleted from table.");
    }
}
```

Main Activity Java file

```
package com.example.smd_march_4;

import android.database.Cursor;
import android.os.Bundle;
import android.util.Log;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {


    DBClass dbClass;
    Cursor cursor;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);

        DBClass  dbClass=new DBClass(this);
        dbClass.addinfo("kanwal","12345");
        dbClass.addinfo("ahmad","12345");
        dbClass.addinfo("akram","12345");
        dbClass.addinfo("saleem","12345");
        dbClass.addinfo("muraad","12345");


        //cursor fetch data

        cursor = dbClass.getAllData();

        if (cursor.getCount() == 0) {
            Toast.makeText(this, "No Data Found", Toast.LENGTH_SHORT).show();
        } else {
            while (cursor.moveToNext()) {
                int id = cursor.getInt(0);
                String name = cursor.getString(1);
                String phone = cursor.getString(2);

                Log.d("DB_FETCH", "ID: " + id + ", Name: " + name + ", Phone: " + phone);
            }
        }

        boolean isUpdated = dbClass.updateData(4, "New Name", "1234567890");

        if (isUpdated) {
            Log.d("DB_UPDATE", "Data updated successfully!");
        } else {
            Log.d("DB_UPDATE", "Failed to update data.");
        }


        boolean isDeleted = dbClass.deleteData(1);

        if (isDeleted) {
            Log.d("DB_DELETE", "Data deleted successfully!");
        } else {
            Log.d("DB_DELETE", "Failed to delete data.");
        }

        cursor.close();
        dbClass.close();


        // home task display all the value after update and drop table

        dbClass.viewAllData();
        dbClass.deleteAllData();


        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });
    }
}
```

End of file