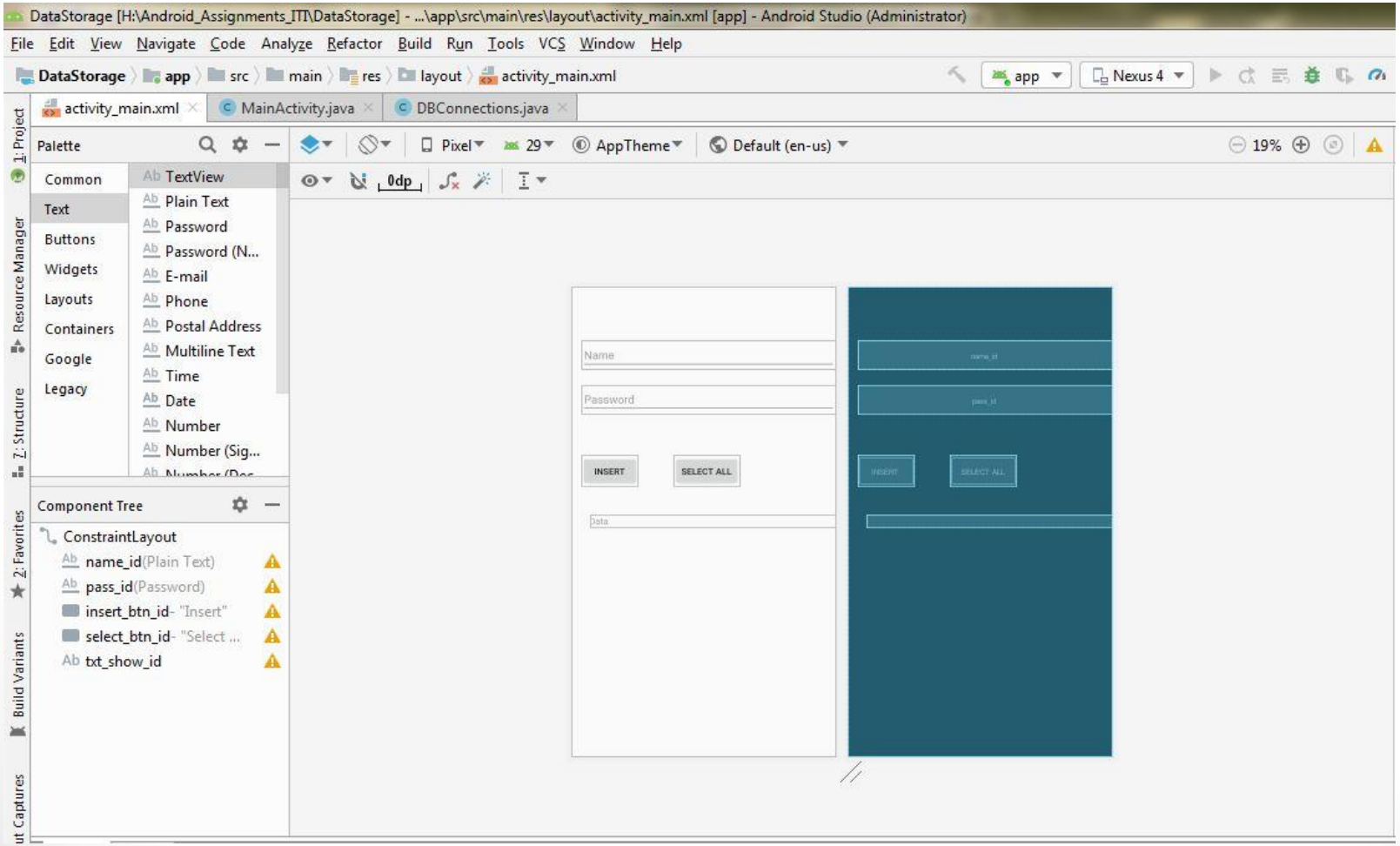
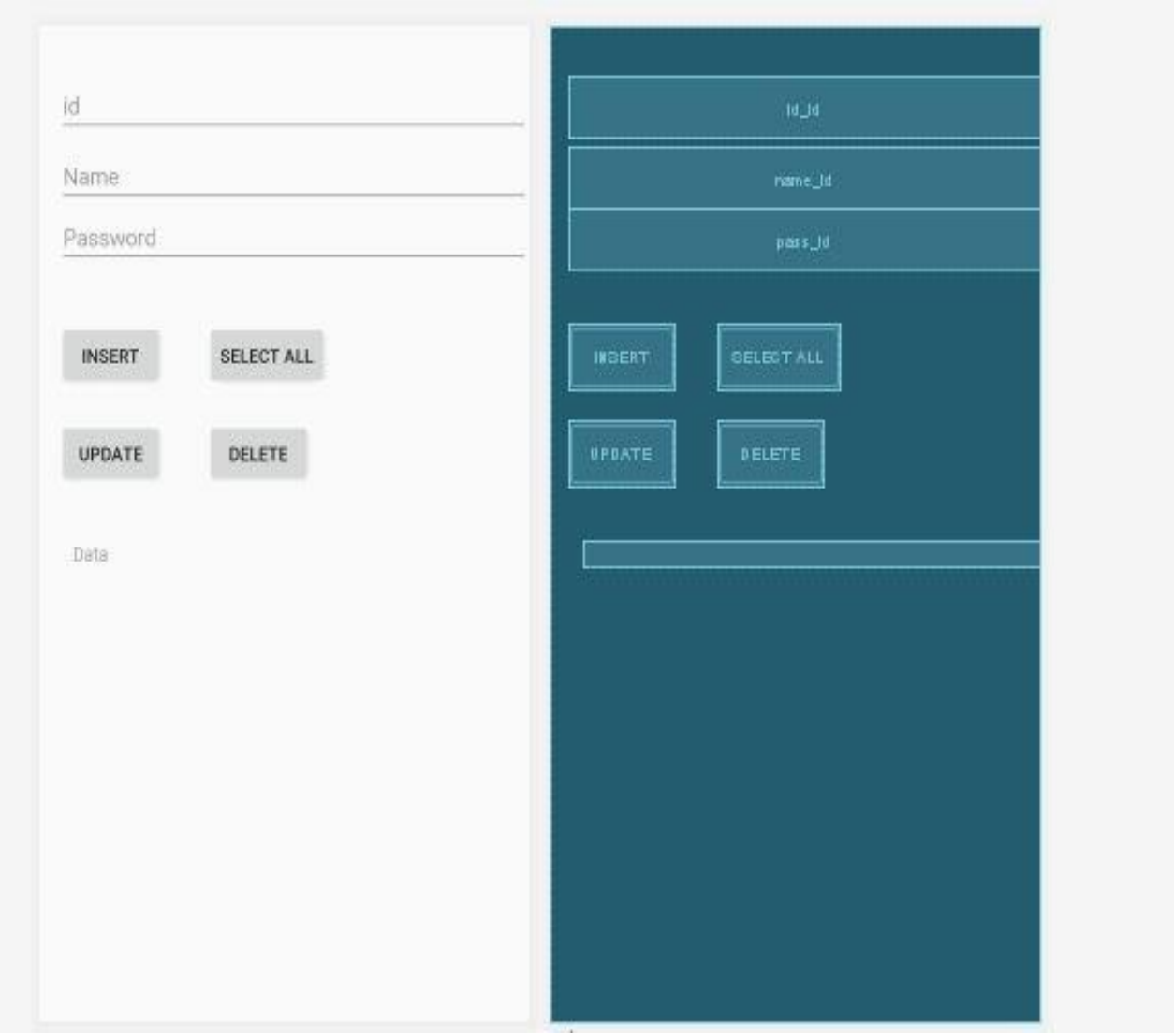
Android

Sec:5&6

Eng:Rasha Sleem

activity_main.xml




id
Name
Password
INSERT
SELECT ALL
UPDATE
DELETE
Data
id_id
name_id
pass_id
INSERT
SELECT ALL
UPDATE
DELETE

```
<EditText
    android:id="@+id/name_id"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Name"
    android:inputType="textPersonName"
    android:layout_marginStart="16dp"
    android:layout_marginLeft="16dp"
    android:layout_marginTop="84dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<EditText
    android:id="@+id/pass_id"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Password"
    android:inputType="textPassword"
    android:layout_marginStart="16dp"
    android:layout_marginLeft="16dp"
    android:layout_marginTop="24dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/name_id" />
```

```
<EditText
    android:id="@+id/id_id"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="36dp"
    android:layout_marginLeft="16dp"
    android:hint="id"
    android:inputType="number"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

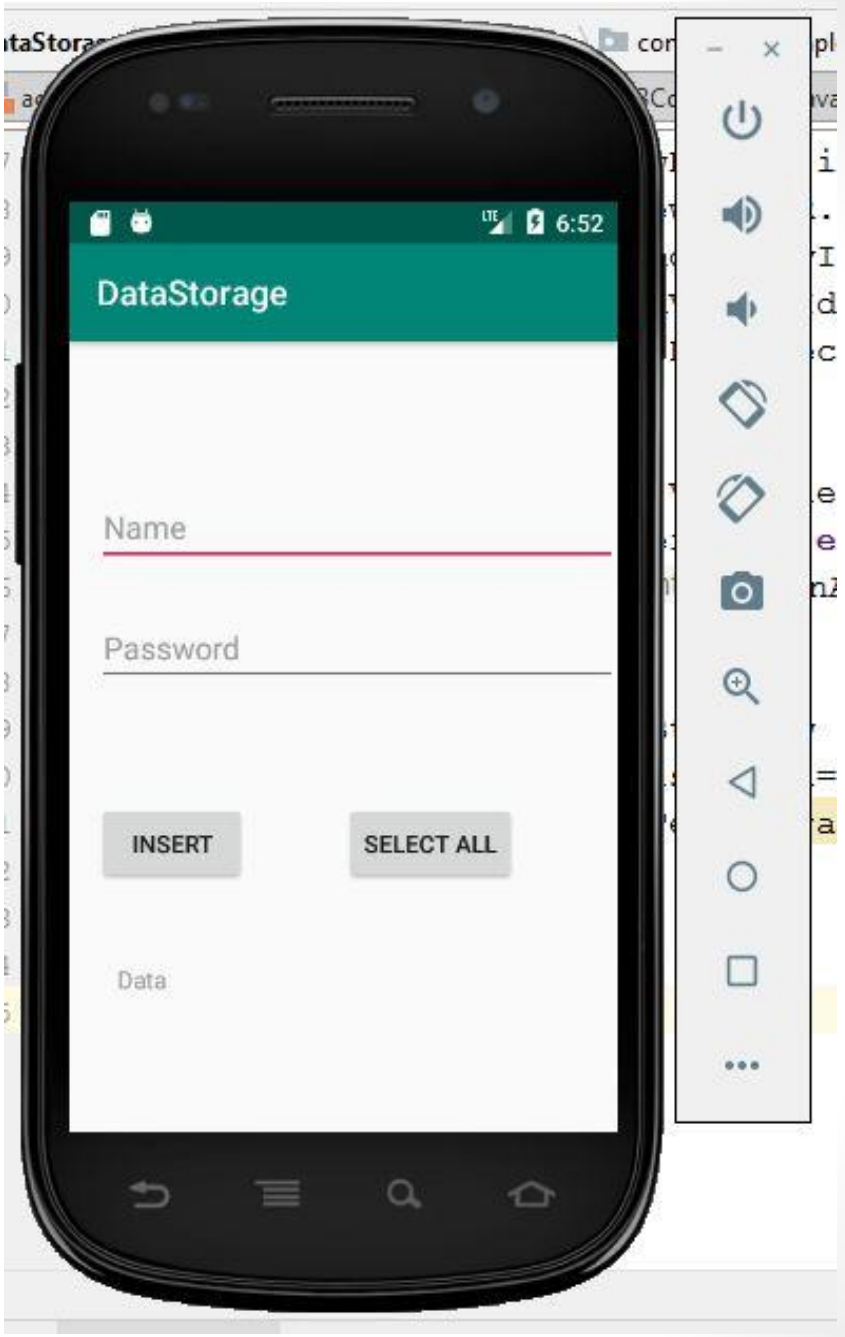
activity_main.xml | MainActivity.java | DBConnections.java

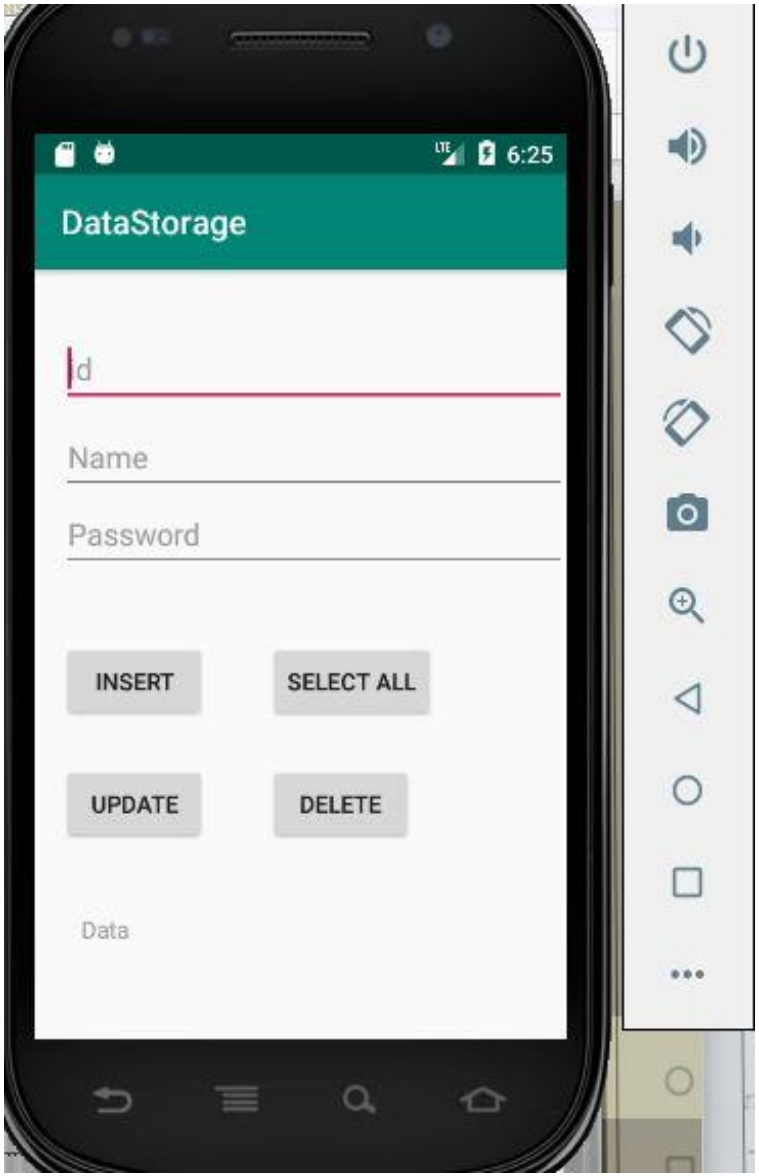
```
33      <Button
34          android:id="@+id/insert_btn_id"
35          android:layout_width="wrap_content"
36          android:layout_height="wrap_content"
37          android:text="Insert"
38          android:onClick="insertBtn"
39          android:layout_marginStart="16dp"
40          android:layout_marginLeft="16dp"
41          android:layout_marginTop="65dp"
42          app:layout_constraintStart_toStartOf="parent"
43          app:layout_constraintTop_toBottomOf="@+id/pass_id" />
44
45      <Button
46          android:id="@+id/select_btn_id"
47          android:layout_width="wrap_content"
48          android:layout_height="wrap_content"
49          android:text="Select All"
50          android:onClick="selectAllBtn"
51          android:layout_marginStart="56dp"
52          android:layout_marginLeft="56dp"
53          android:layout_marginTop="65dp"
54          app:layout_constraintStart_toEndOf="@+id/insert_btn_id"
55          app:layout_constraintTop_toBottomOf="@+id/pass_id" />
```

androidx.constraintlayout.widget.ConstraintLayout › Button

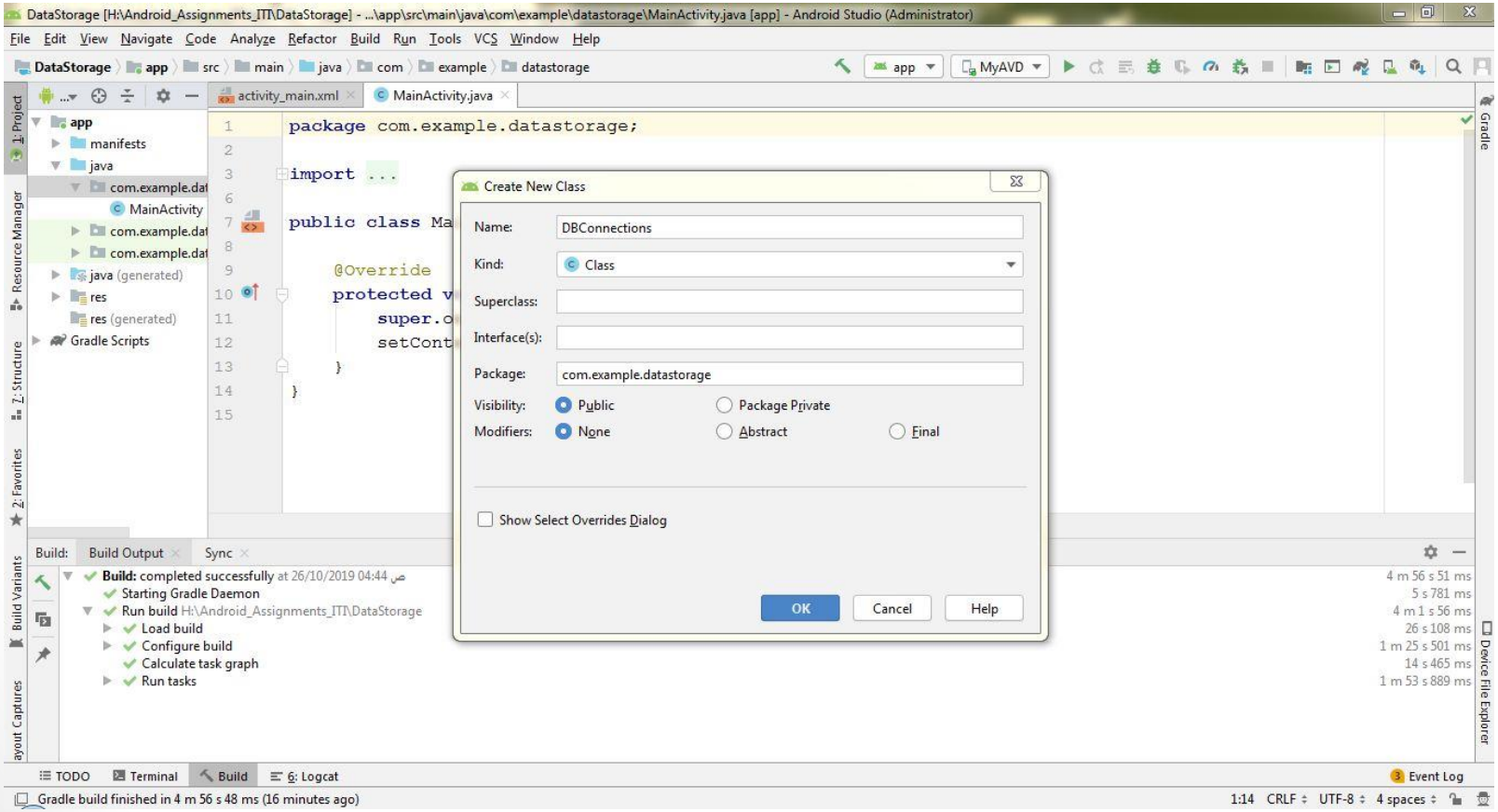
```
<Button
    android:id="@+id/update_btn_id"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginLeft="16dp"
    android:layout_marginTop="24dp"
    android:onClick="updateBtn"
    android:text="Update"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/insert_btn_id" />

<Button
    android:id="@+id/delete_btn_id"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="36dp"
    android:layout_marginLeft="36dp"
    android:layout_marginTop="24dp"
    android:onClick="deleteBtn"
    android:text="Delete"
    app:layout_constraintStart_toEndOf="@+id/update_btn_id"
    app:layout_constraintTop_toBottomOf="@+id/select_btn_id" />
```

```
<TextView
    android:id="@+id/txt_show_id"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="28dp"
    android:layout_marginLeft="28dp"
    android:layout_marginTop="44dp"
    android:hint="Data"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/insert_btn_id" />
```


6:52
DataStorage
Name
Password
INSERT
SELECT ALL
Data


6:25
DataStorage
id
Name
Password
INSERT
SELECT ALL
UPDATE
DELETE
Data

App→java→com.example…(package name)→right click→new class



DBConnections.java

- **public class** DBConnections **extends** SQLiteOpenHelper {

- **public static final** String ***DBName***="**myDataBase**";

- **public static final int *version***=1;
- **public** DBConnections(Context context){
  super(context,***DBName***,**null**,***version***);

  }

- @Override

```
public void onCreate(SQLiteDatabase db) {

db.execSQL("create table IF NOT EXISTS myTable (id
        INTEGER primary key,name TEXT,pass TEXT)");
  }
```

- @Override

```
public void onUpgrade(SQLiteDatabase db, int oldVersion, int
newversion) {

db.execSQL("drop table if EXISTS myTable "); onCreate(db);
  }
```

```
public void insertToDB(String name,String pass){
        SQLiteDatabase db=this.getWritableDatabase();
        ContentValues contentValues=new ContentValues();
        contentValues.put("name",name);
        contentValues.put("pass",pass);
        db.insert("myTable",null,contentValues);

    }
 public ArrayList getData(){
        ArrayList dataArray=new ArrayList();
        SQLiteDatabase db=this.getReadableDatabase();
        Cursor cursor=db.rawQuery("select * from myTable",null);
        cursor.moveToFirst();
        while(cursor.moveToNext()){
dataArray.add(cursor.getString(0)+cursor.getString(1)+cursor.getString(2));
        }
        return dataArray;
    }}
```

```
public void DeleteRaw(String id){
   SQLiteDatabase db=this.getWritableDatabase();
   db.execSQL("delete from myTable where id="+id);

 // db.delete("myTable","id=?",new String[]{ id});
}

public void updateRaw(String new_name,String id){
   SQLiteDatabase db=this.getWritableDatabase();
   db.execSQL("update myTable set
name='"+new_name+"'where id="+id);
/*  ContentValues c_value=new ContentValues();
   c_value.put("name",new_name);
   db.update("myTable",c_value,"id=?",new String[]{id});
  */
}
```

MainActivity.java

```
public class MainActivity extends AppCompatActivity {
    EditText edit_name,edit_pass,edit_id;
    Button btn_insert,btn_select_all;
    TextView txt_show_data;

    DBConnections dbConnections;
 @Override
  protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

    edit_name=findViewById(R.id.name_id);
    edit_pass=findViewById(R.id.pass_id);
    edit_id=findViewById(R.id.id_id);

    btn_insert=findViewById(R.id.insert_btn_id);
    btn_select_all=findViewById(R.id.select_btn_id);
    txt_show_data=findViewById(R.id.txt_show_id);

      dbConnections=new DBConnections(this);
  }
```

```
public void insertBtn(View view) {

dbConnections.insertToDB(edit_name.getText().toString(),
edit_pass.getText().toString());

Toast.makeText(MainActivity.this,"ok",Toast.LENGTH_SHORT).show
();
    }


    public void selectAllBtn(View view) {

        ArrayList array_List_data=dbConnections.getData();

        txt_show_data.setText(array_List_data.toString()+"\n");

    }
}
```

- **public void** updateBtn(View view) {

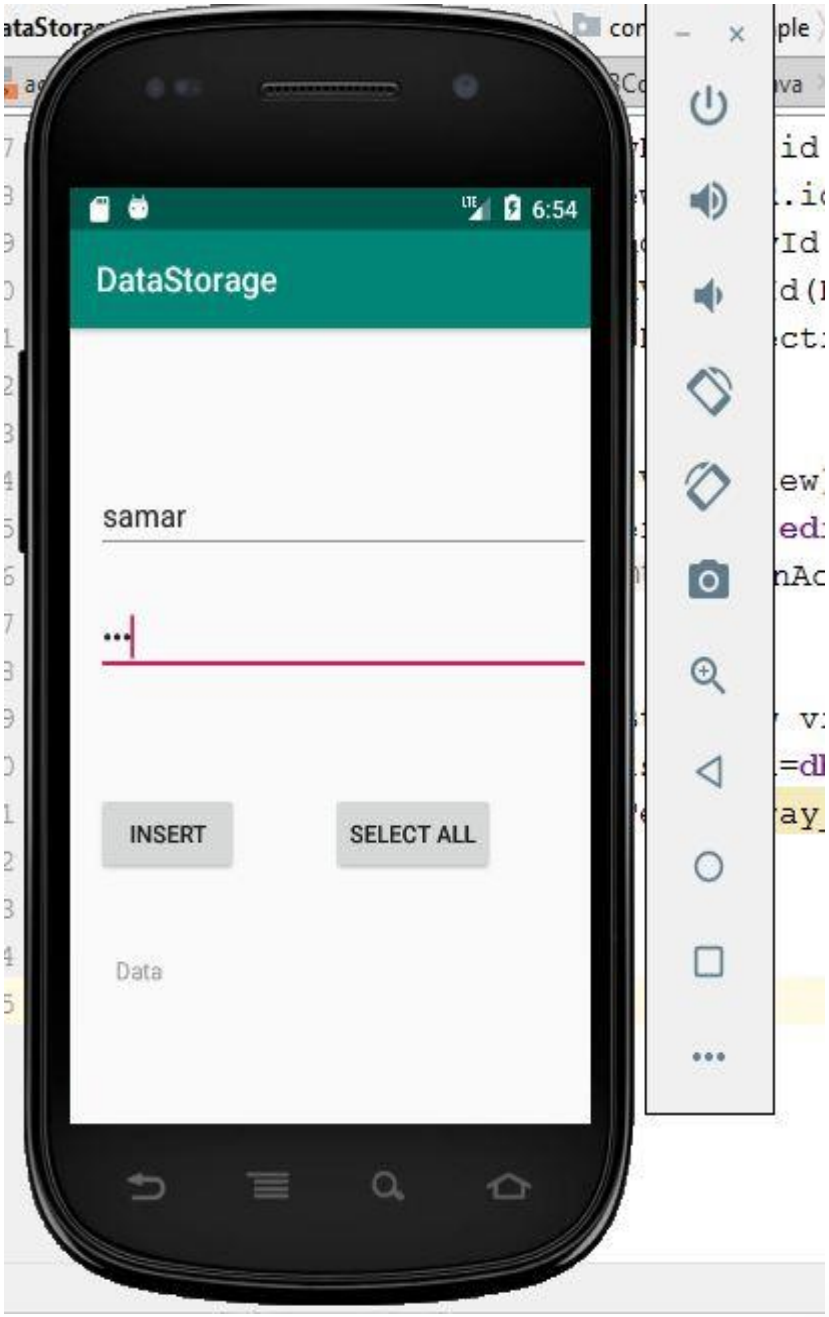
  dbConnections.updateRaw(**edit_name**.getText().toString(),**edit_id**.getText().toString());
- ArrayList array_List_data=**dbConnections**.getData();
  txt_show_data.setText(array_List_data.toString()+**"\n"**);

  }
- **public void** deleteBtn(View view) {
  dbConnections.DeleteRaw(**edit_id**.getText().toString());

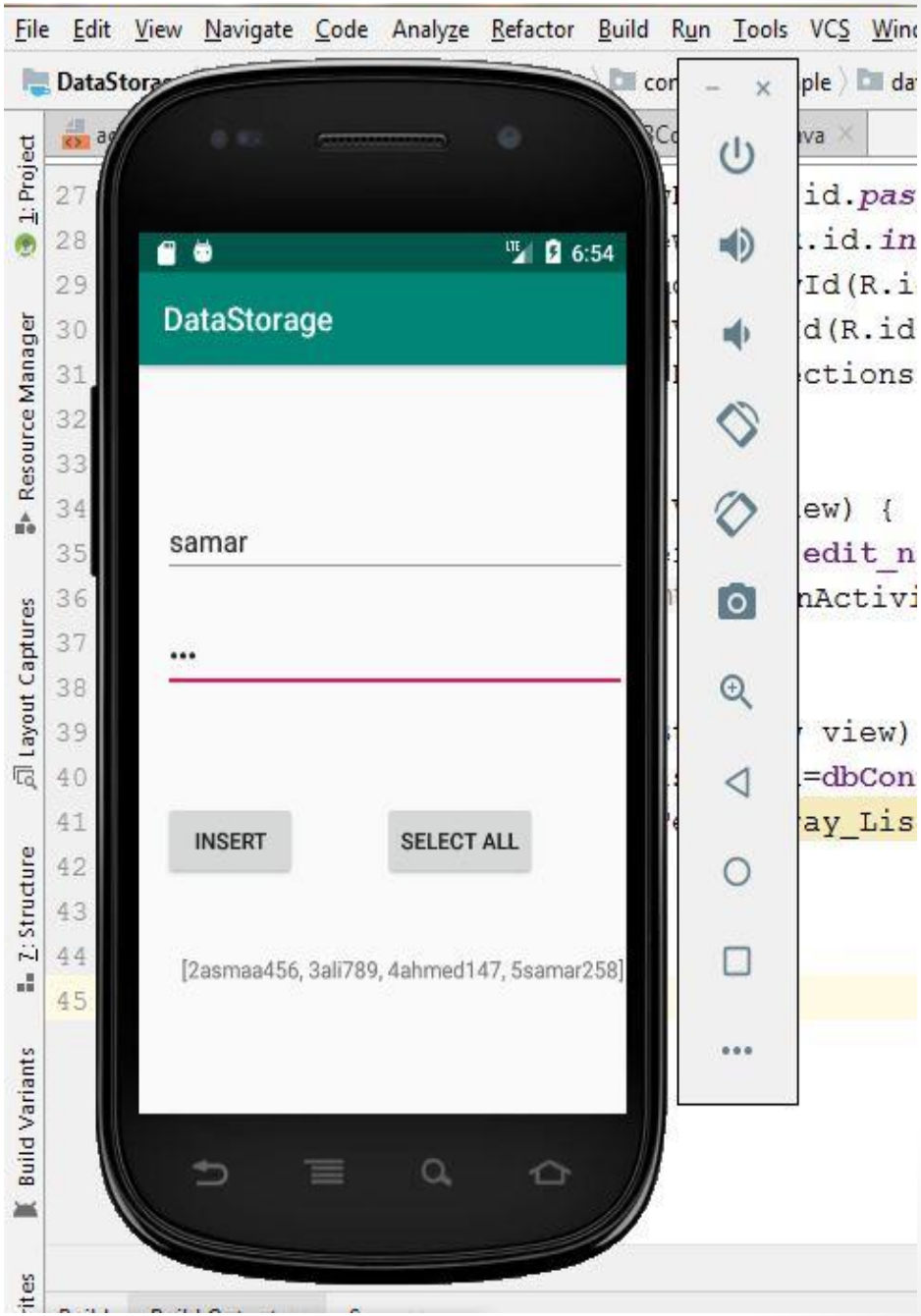
- ArrayList array_List_data=**dbConnections**.getData();
  txt_show_data.setText(array_List_data.toString()+**"\n"**);

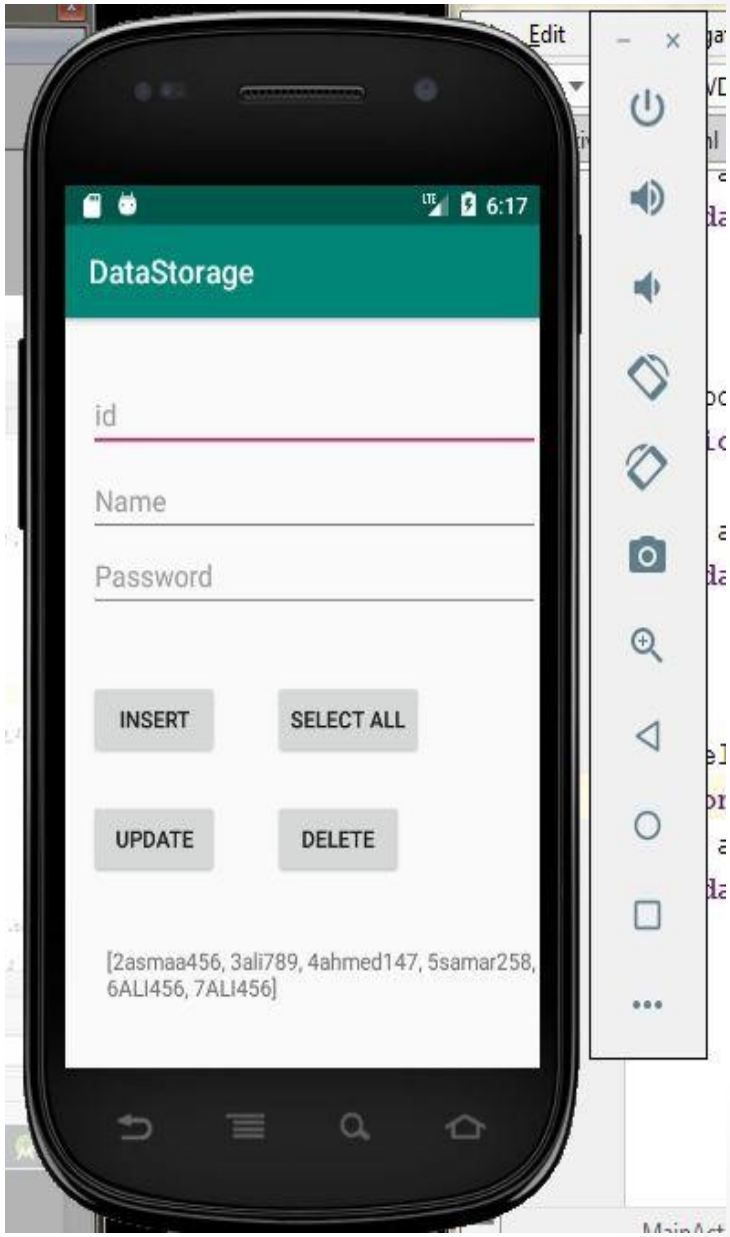
  }

Insert

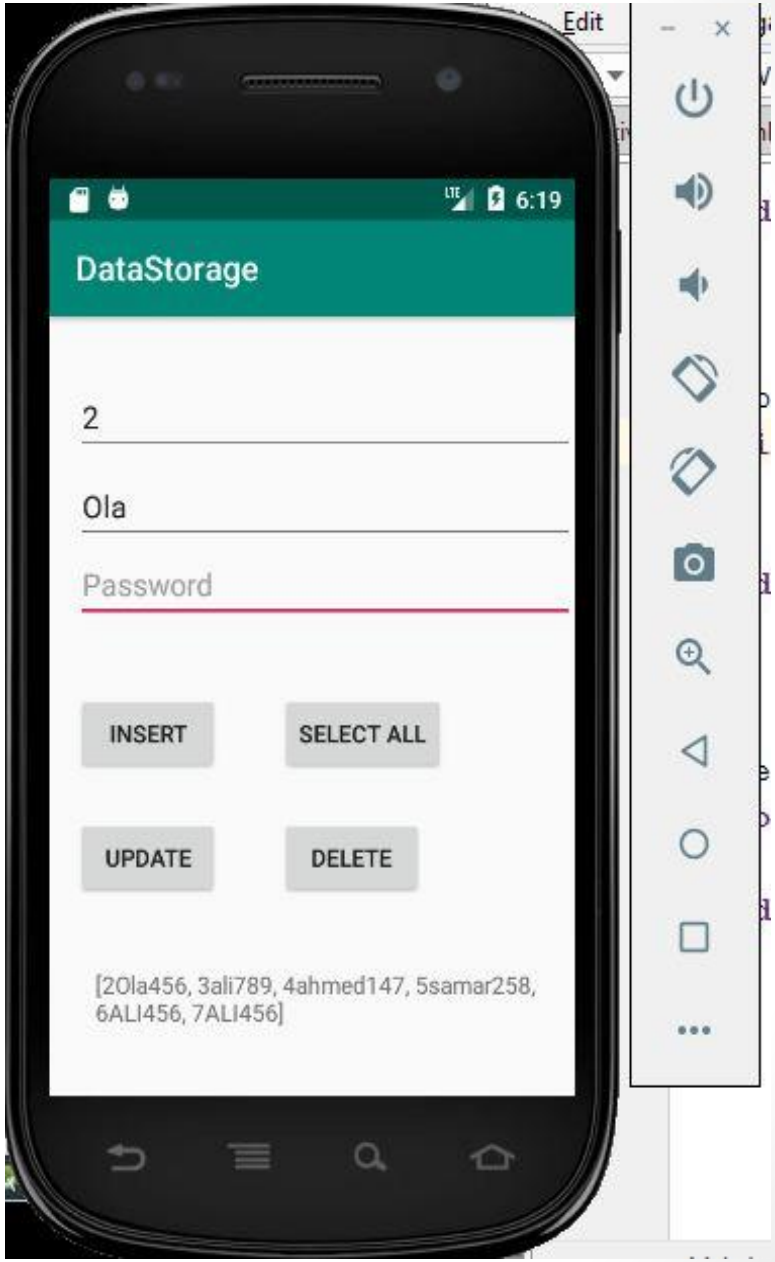


Select

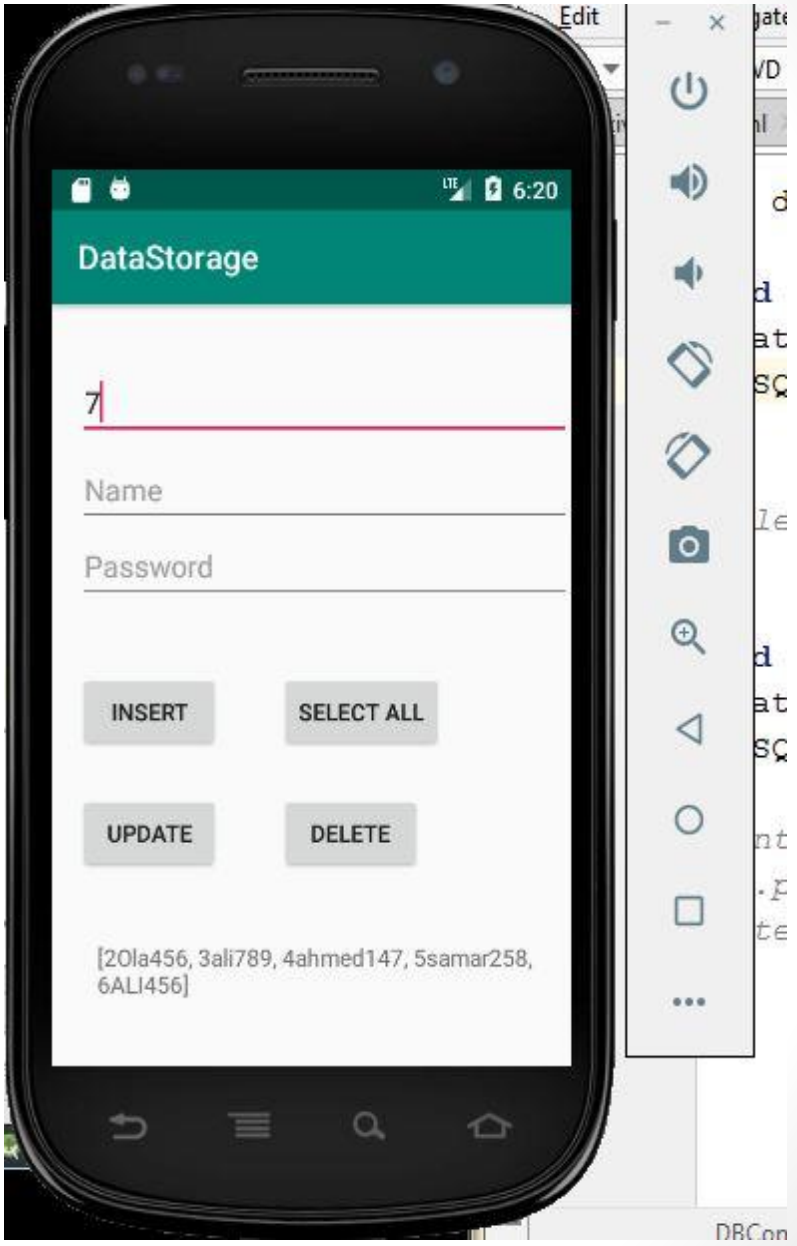

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS
DataStorage
6:54
DataStorage
samar
...
INSERT
SELECT ALL
[2asmaa456, 3ali789, 4ahmed147, 5samar258]
1: Project
Resource Manager
Layout Captures
7: Structure
Build Variants


Edit
6:17
DataStorage
id
Name
Password
INSERT
SELECT ALL
UPDATE
DELETE
[2asmaa456, 3ali789, 4ahmed147, 5samar258, 6ALI456, 7ALI456]

update


Edit
6:19
DataStorage
2
Ola
Password
INSERT
SELECT ALL
UPDATE
DELETE
[2Ola456, 3ali789, 4ahmed147, 5samar258, 6ALI456, 7ALI456]

Delete


6:20
DataStorage
7
Name
Password
INSERT
SELECT ALL
UPDATE
DELETE
[20la456, 3ali789, 4ahmed147, 5samar258, 6ALI456]