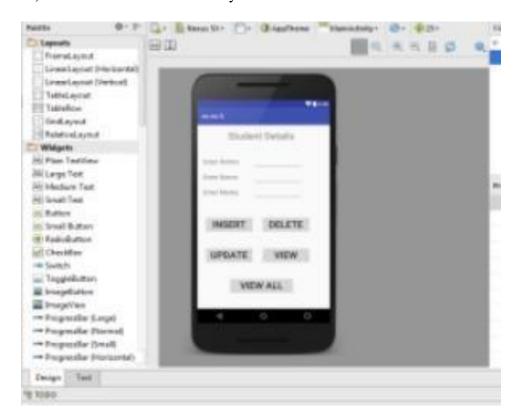
Experiment No. 02

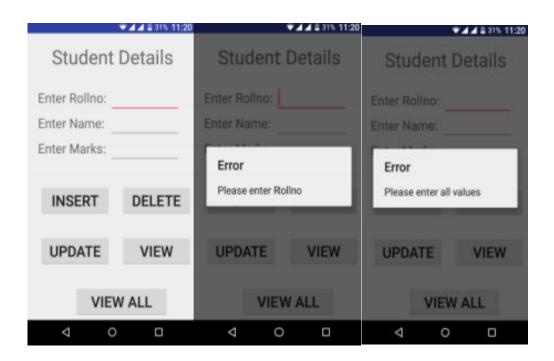
Name-Rebecca Dias Roll No-19 BECMPN A PID-182027 Batch- 2

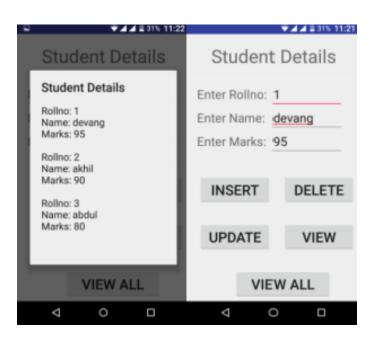
Aim: Develop an application that uses database.

Theory:

- 1) Open android studio and select new android project
- 2) Give project name and select next
- 3) Choose the android version. Choose the lowest android version and select next
- 4) Enter the package name. package name must be two word separated by comma and click finish
- 5) Go to package explorer in the left-hand side. select our project.
- 6) Go to res folder and select layout.







Implementation:

```
import com.google.firebase.database.DataSnapshot; import
com.google.firebase.database.DatabaseError; import
com.google.firebase.database.DatabaseReference; import
com.google.firebase.database.FirebaseDatabase; import
com.google.firebase.database.ValueEventListener;
public class MapsActivity extends FragmentActivity implements OnMapReadyCallback {
// Creating objects
       private DatabaseReference databaseReference;
   // Creating Database Reference
               databaseReference =
FirebaseDatabase.getInstance().getReference("Location"); public
        void updateButtonOnCLick(View view) {
           # Write operation
databaseReference.child("latitude").push().setValue(editTextLatitude.getText().toS tring());
databaseReference.child("longitude").push().setValue(editTextLongitude.getText()
.toString());
# Read operation
String databaseLatituteString =
snapshot.child ("latitude").get Value (). to String (). substring (1, snapshot.child ("latitude").get Value (). to String (). substring (1, snapshot.child ("latitude").get Value (). to String (). substring (1, snapshot.child ("latitude").get Value (). to String (). substring (1, snapshot.child ("latitude").get Value (). to String (). substring (1, snapshot.child ("latitude").get Value (). to String (). substring (1, snapshot.child ("latitude").get Value (). to String (). substring (). snapshot.child ("latitude").get Value (). to String (). snapshot.child (). snapshot.c
").getValue().toString().length() -1);
 String databaseLongituteString =
snapshot.child("longitude").getValue().toString().substring(1,snapshot.child("longi
tude").getValue().toString().length() -1);
       }
}
```

Output:



Conclusion:

From this experiment, we learnt how to connect a database with an android application. We used Google Firebase- Real-time database which saves data in json format, tree like structure. When the user presses a button to call his last location, the read operation takes place, which reads, the last value from the database. When the user travels to a location, their current value is written to the database.