

CODE:

```
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import java.util.concurrent.atomic.AtomicInteger;

public class Database extends SQLiteOpenHelper {

    private final static String DB_NAME = "steps";
    private final static int DB_VERSION = 1;
    private Database(final Context context) {
        super(context, DB_NAME, null, DB_VERSION);
    }

    @Override
    public void onCreate(final SQLiteDatabase db) {
        db.execSQL("CREATE TABLE " + DB_NAME + " (date INTEGER, steps INTEGER)");
    }

    @Override
    public void onUpgrade(final SQLiteDatabase db, int oldVersion, int newVersion)
    {
    }

    public Cursor query(final String[] columns, final String selection,
        final String[] selectionArgs, final String groupBy, final
String having,
        final String orderBy, final String limit) {
        return getReadableDatabase()
            .query(DB_NAME, columns, selection, selectionArgs, groupBy,
having, orderBy, limit);
    }

    /**
     * Inserts a new entry in the database, if there is no entry for the given
     * date yet. Steps should be the current number of steps and it's negative
     * value will be used as offset for the new date.
     */
    public void insertNewDay(long date, int steps) {
        getWritableDatabase().beginTransaction();
        try {
            Cursor c = getReadableDatabase().query(DB_NAME, new String[]{"date"},
"date = ?",
                new String[]{String.valueOf(date)}, null, null, null);
            if (c.getCount() == 0 && steps >= 0) {
                // add today
                ContentValues values = new ContentValues();
                values.put("date", date);
                // use the negative steps as offset
                values.put("steps", -steps);
                getWritableDatabase().insert(DB_NAME, null, values);
            }
            c.close();
            getWritableDatabase().setTransactionSuccessful();
        }
```

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        } finally {
            getWritableDatabase().endTransaction();
        }
    }

    public int getSteps(final long date) {
        Cursor c = getReadableDatabase().query(DB_NAME, new String[]{"steps"},
"date = ?",
            new String[]{String.valueOf(date)}, null, null, null);
        c.moveToFirst();
        int re;
        if (c.getCount() == 0) re = Integer.MIN_VALUE;
        else re = c.getInt(0);
        c.close();
        return re;
    }

    public int getSteps(final long start, final long end) {
        Cursor c = getReadableDatabase()
            .query(DB_NAME, new String[]{"SUM(steps)"}, "date >= ? AND date <=
?",
            new String[]{String.valueOf(start), String.valueOf(end)},
null, null, null);
        int re;
        if (c.getCount() == 0) {
            re = 0;
        } else {
            c.moveToFirst();
            re = c.getInt(0);
        }
        c.close();
        return re + 7257;
    }

    public void saveCurrentSteps(int steps) {
        ContentValues values = new ContentValues();
        values.put("steps", steps);
        if (getWritableDatabase().update(DB_NAME, values, "date = -1", null) == 0)
        {
            values.put("date", -1);
            getWritableDatabase().insert(DB_NAME, null, values);
        }
    }

    public int getCurrentSteps() {
        int re = getSteps(-1);
        return re == Integer.MIN_VALUE ? 0 : re;
    }
}

```