Importing Shape files into Spatialite Database

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Requirements

- Installing Spatialite on Ubuntu
- Installing Spatialite Tools on Ubuntu
- Installing GDAL Tools

Change shape file projection

1. Change projection of shape file using the following command:

```
$ ogr2ogr -s_srs EPSG:<Shape file projection> -t_srs EPSG:3857 <Output.shp>
<Input.shp>
```

- Shape file projection = projection of shape file
- Input.shp = input shape file
- Output.shp = output shape file

Import shape file into spatialite database

1. Import shape file into spatialite database using the following command:

```
$ spatialite_tool -i -shp <Input> -d <SpatialiteDB.sqlite> -t <Table name> -g
Geometry -c utf-8 -s 3857
```

- Input.shp = input shape file
- SpatialiteDB.sqlite = output spatialite database
- Table name = table to import shape file into

> *Note: You can import multiple shape files into the same spatialite database.*

Adding spatial indexes

1. Open database file

```
$ sqlite3 <SpatialiteDB.sqlite>
```

2. Create index for each table added

```
> SELECT CreateSpatialIndex('<table>', 'Geometry');
```

- SpatialiteDB.sqlite = spatialite database
- Table = table name added