LECTURE – 04

CREATING VECTOR DATA IN QGIS

Course Instructor:

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Content

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- Creating New Shapefiles

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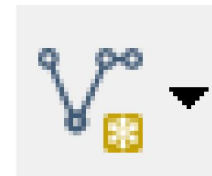
- Adding Attributes in Vector Layer

Creating Vector Dataset

- The data that you use has to come from somewhere.

- For most common applications, the data exists already; but the more particular and specialized the project, the less likely it is that the data will already be available.

- In such cases vector dataset need to be created by the user.

Creating New Shapefiles

- Command Path:

  - Layer > Create > New Shapefile Layer

  - Shortcut: ctrl + shift + N

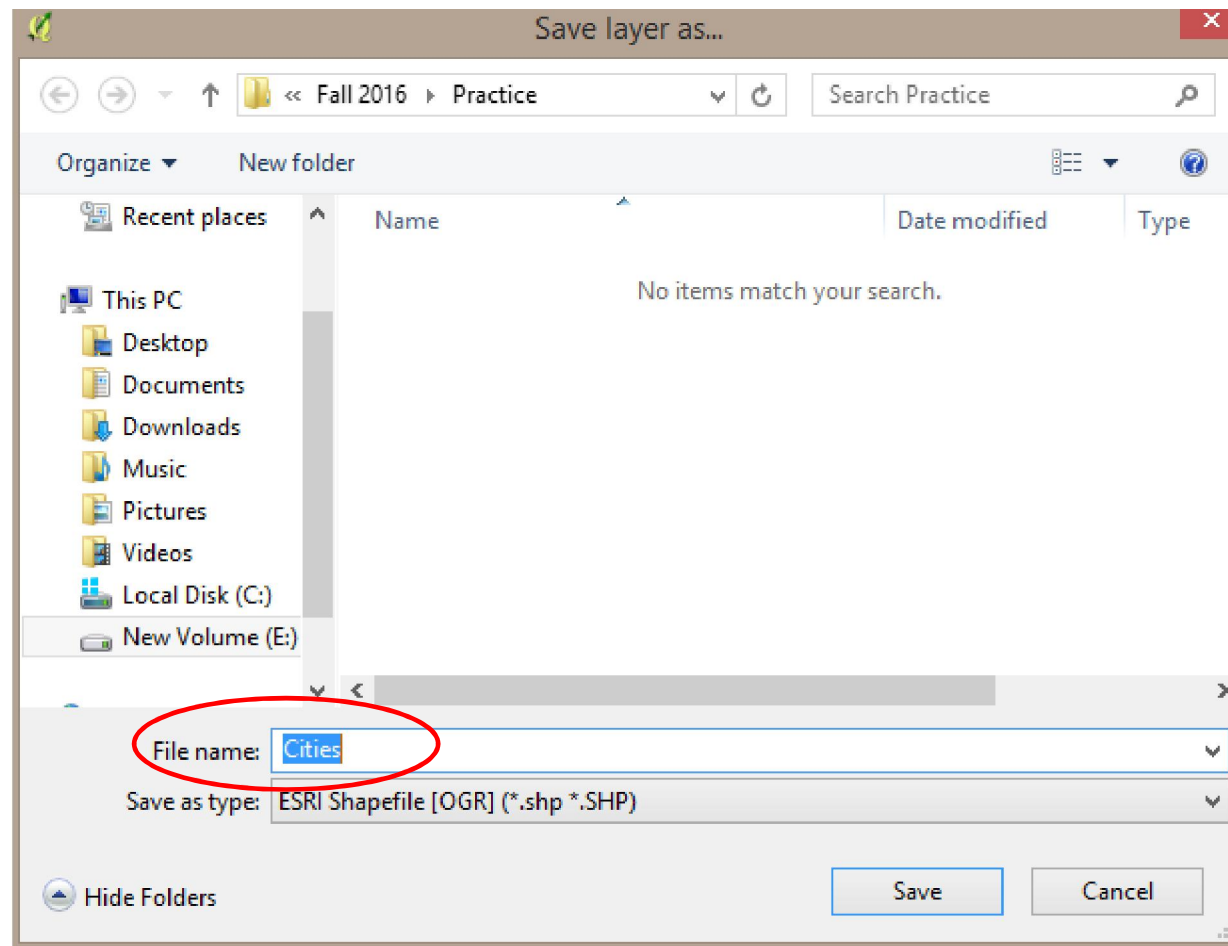 - Manage Layer Toolbar: New Shapefile Layer

Creating New Shapefiles

■ After clicking New Shapefile Layer, the following dialogue box opens:

■ Here you have option to create either Point, Line or Polygon Shapefile.

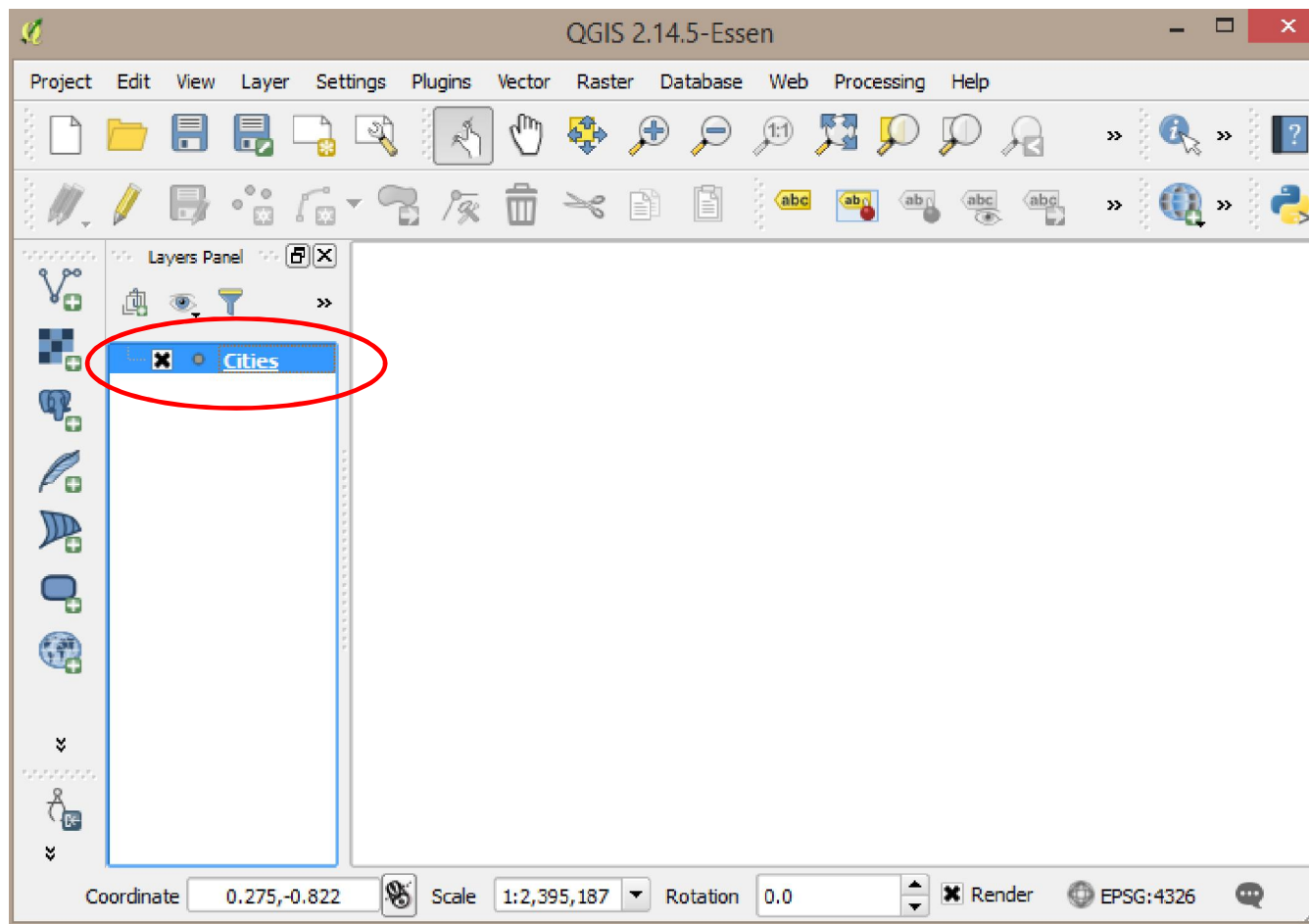■ After selecting Type, select CRS for the layer and click OK.

Creating New Shapefiles

■ Specify File Name for the layer and click Save.

Creating New Shapefiles

■ After saving, the layer name get displayed in the Layer Panel

Adding Features in Vector Layer

■ Now, we can add features in this layer and attributes for the features.

■ For adding features in vector layer, first turn on Editing Mode by clicking Toggle Editing option in the Digitizing Toolbar.

■ Now click on Add Feature option in the Digitizing Toolbar.

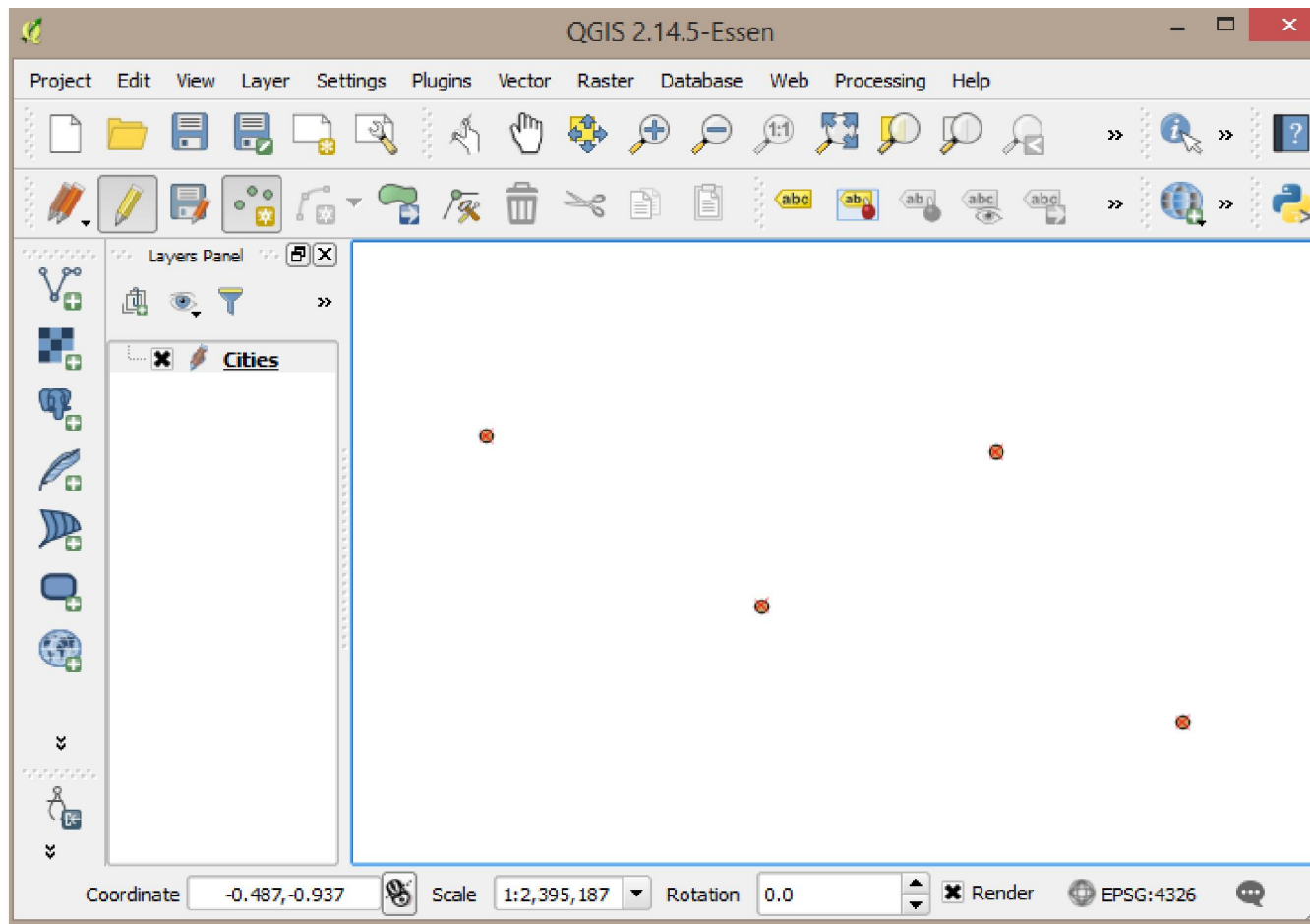# Adding Features in Vector Layer

■ Now add features in the Map Canvas for the layer.

Adding Features in Vector Layer

■ Some editing options in Digitizing Toolbar:

Paste Feature(s): paste a cut or copied feature

Copy Feature(s): copy the selected feature

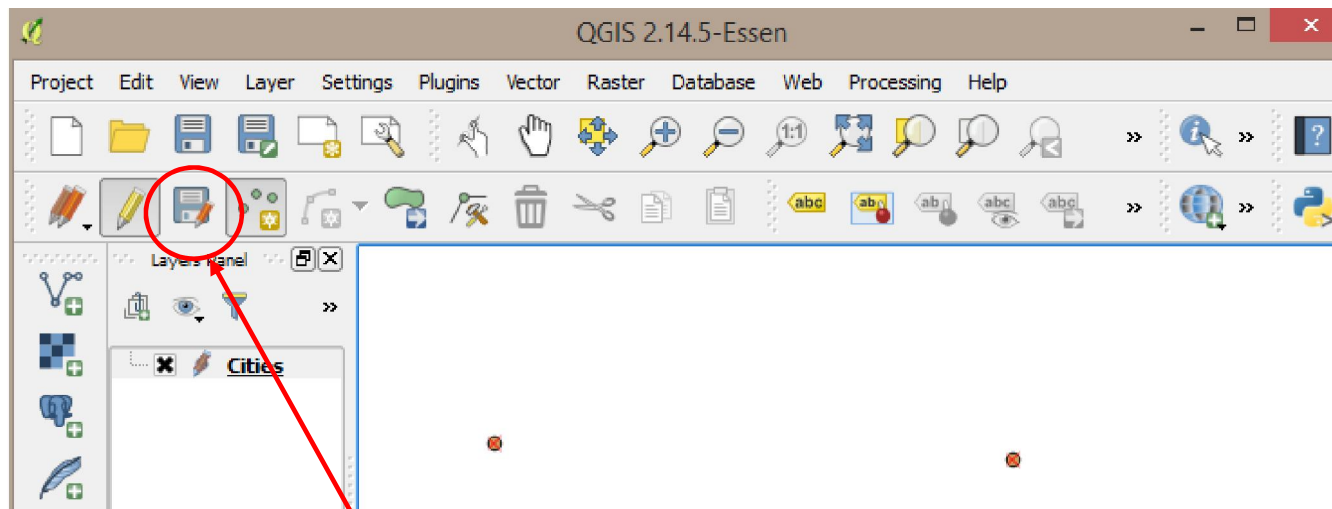**Cut Feature(s):** cut the selected feature

Delete Selected: delete the selected feature

Node Tool: move only one part of a feature

Move Feature(s): move an entire feature around
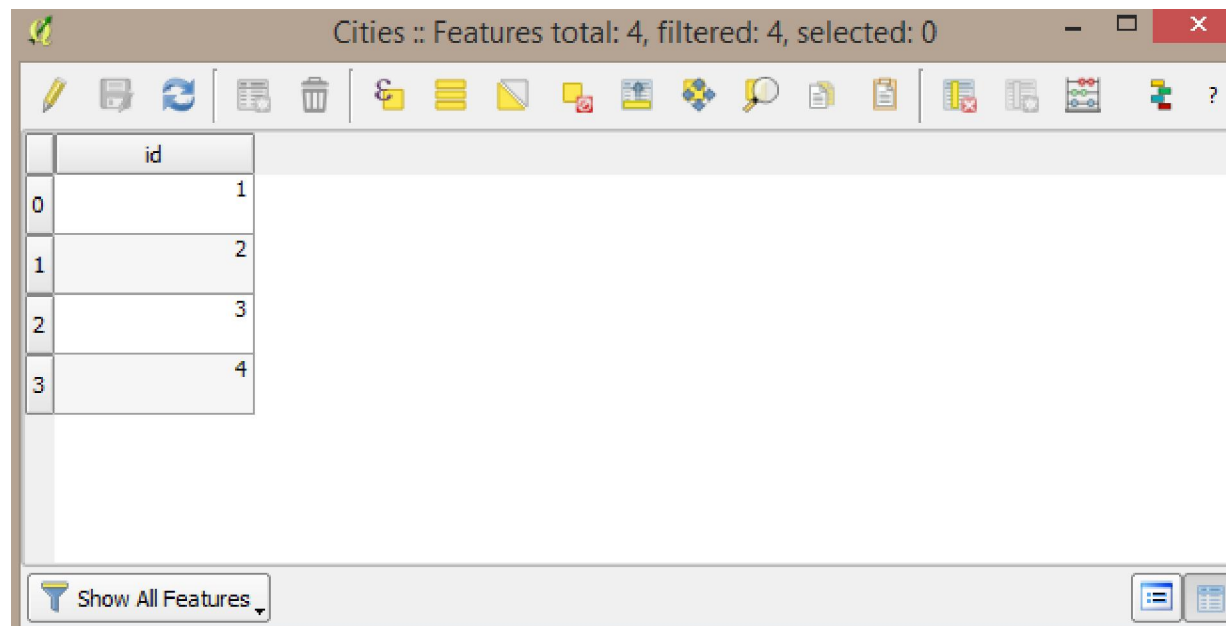
Adding Features in Vector Layer

■ After adding all features and doing necessary edits, click on Save Edits and then click on Toggle Editing to turn off editing mode.
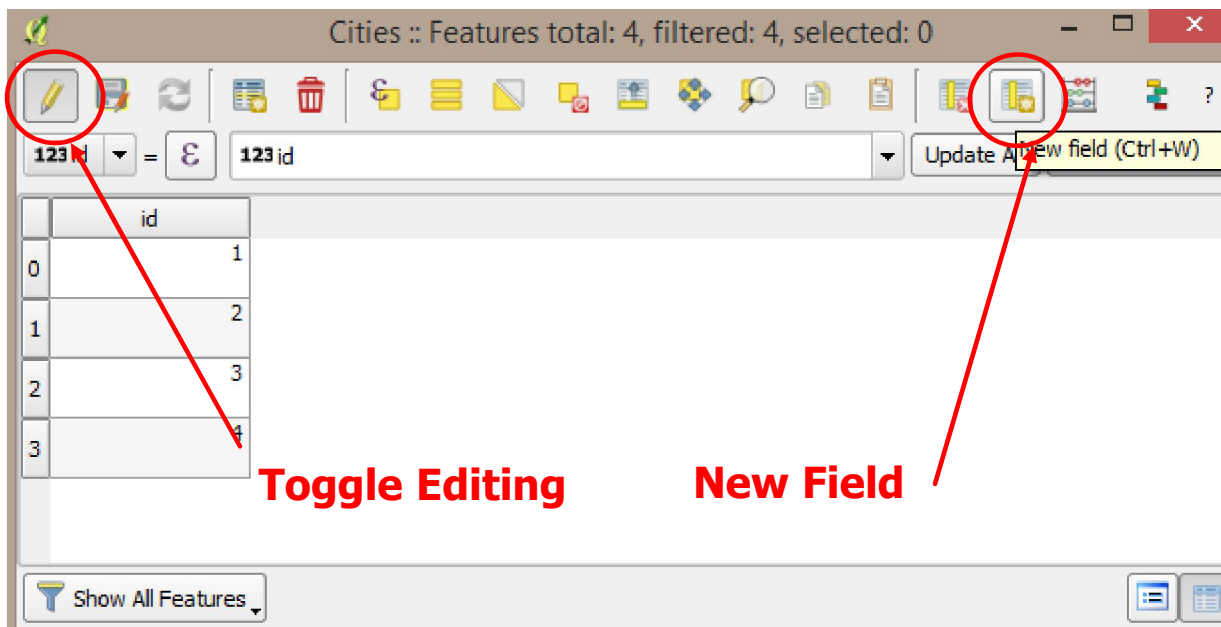

Save Edits

Adding Attributes in Vector Layer

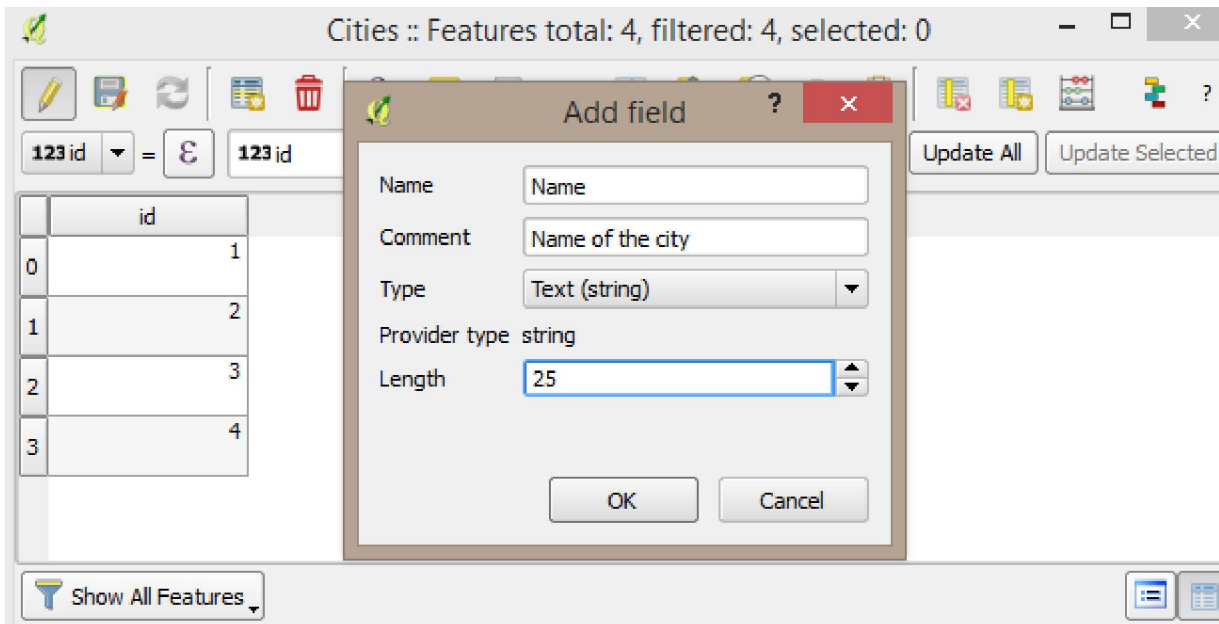■ Now that we have added features, we can go to Attribute Table of the layer to add attributes

Adding Attributes in Vector Layer

■ Click on Toggle Editing and then click on New Field
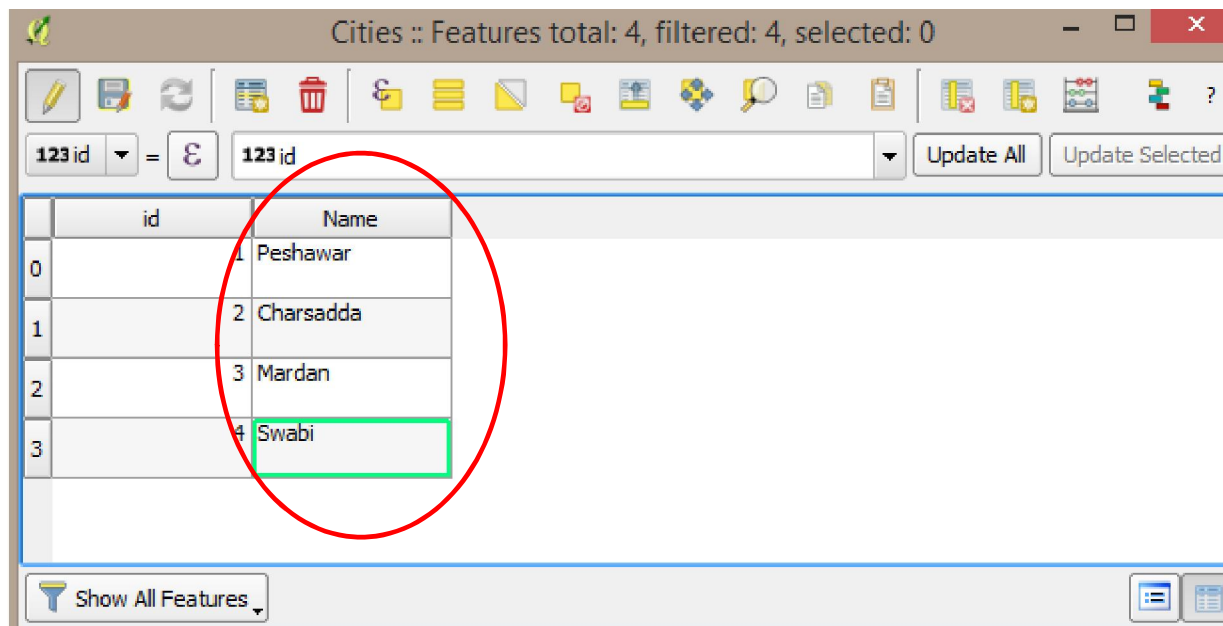

Toggle Editing   **New Field**

Adding Attributes in Vector Layer

- Specify necessary data for defining field values.

Adding Attributes in Vector Layer

■ Add field values. Add more fields for defining more information about each feature in the layer and then click on Save Edits and turn off editing mode.

Adding Attributes in Vector Layer

- Using the procedure specified in the previous slides, we can define Line and Polygon features and define attributes table based on our requirements.

- Features are usually added on a raster data which is already georeferenced (digitization process)

- Attributes values for each feature are collected based on data collected during surveys.

References

- QGIS Training Manual