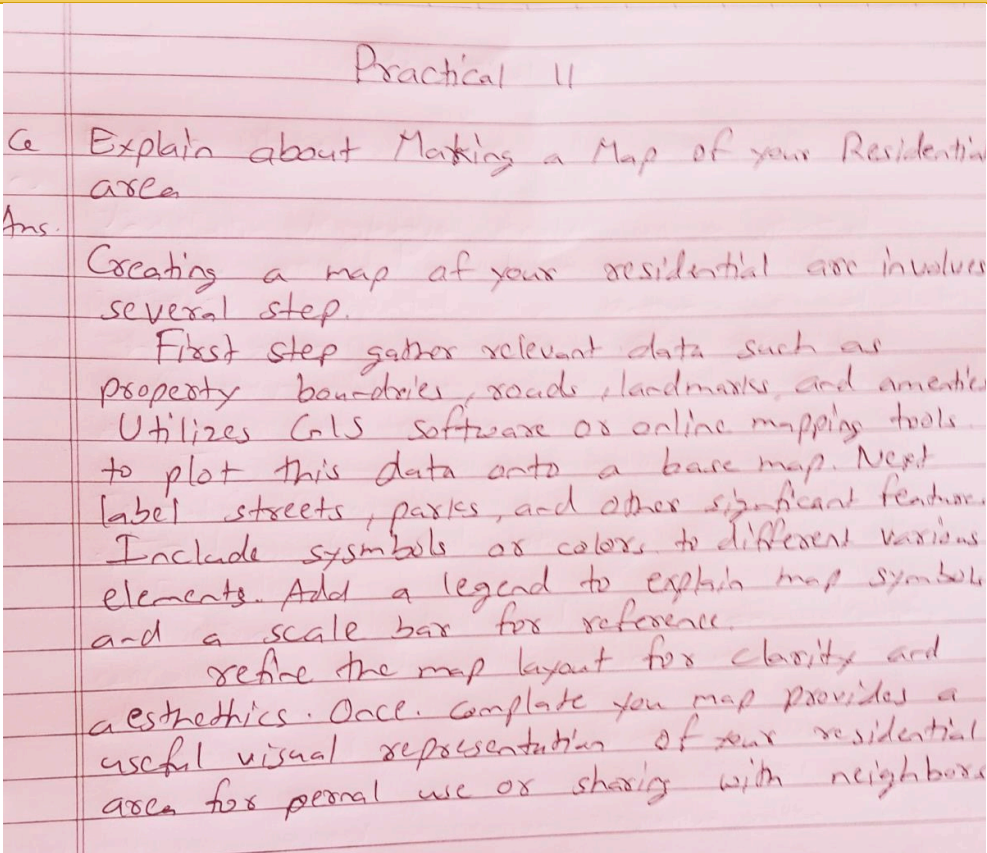


USIT 6P4 Principles of Geographic Information Systems

Practical #11

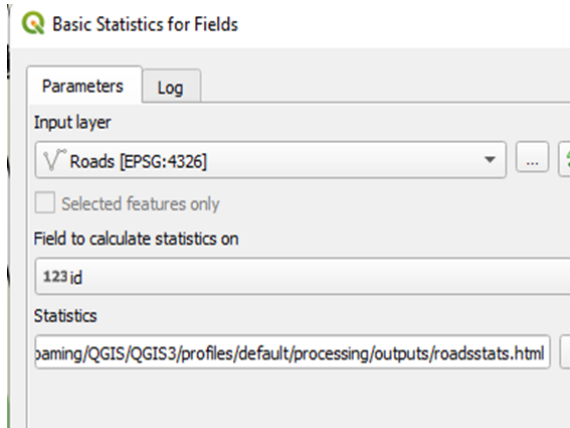
| | | | |
|----------------|--|-------------|------------|
| Name | Sanjeev Gupta | Roll Number | 21302B0023 |
| Class | TY BSC IT | Division | C |
| Subject/Course | USIT 6P4 Principles of Geographic Information Systems | | |
| Topic | Making a Map of your Residential Area and calculating Basic Statistics | | |

Explain about Making a Map of your Residential Area.

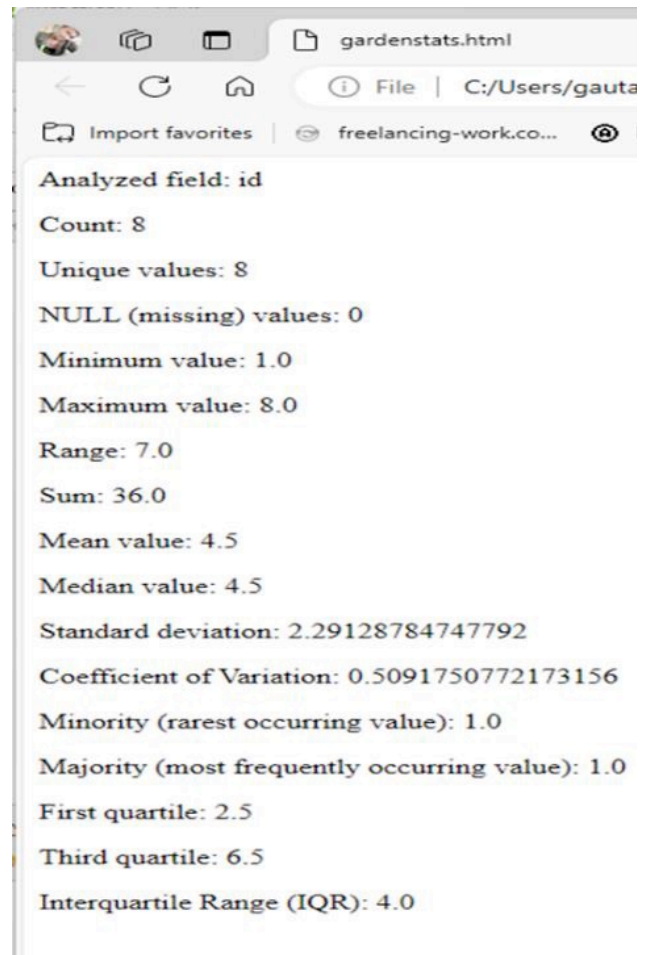
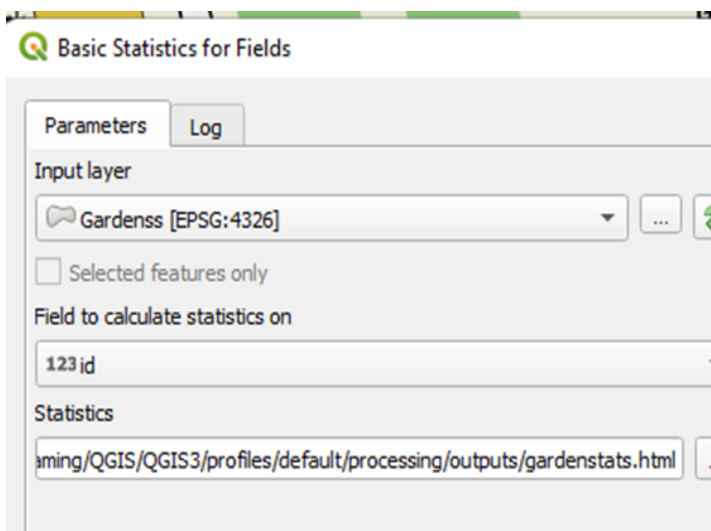
| | |
|--|--|
| |  <p>Practical 11</p> <p>Q Explain about Making a Map of your Residential area.</p> <p>Ans. Creating a map of your residential area involves several steps.</p> <p>First step gather relevant data such as property boundaries, roads, landmarks, and amenities. Utilizes GIS software or online mapping tools to plot this data onto a base map. Next label streets, parks, and other significant features. Include symbols or colors to different various elements. Add a legend to explain map symbols and a scale bar for reference.</p> <p>refine the map layout for clarity and aesthetics. Once complete you map provides a useful visual representation of your residential area for personal use or sharing with neighbors.</p> |
|--|--|

Calculating Basic Statistics. [Write steps and insert Screenshot]

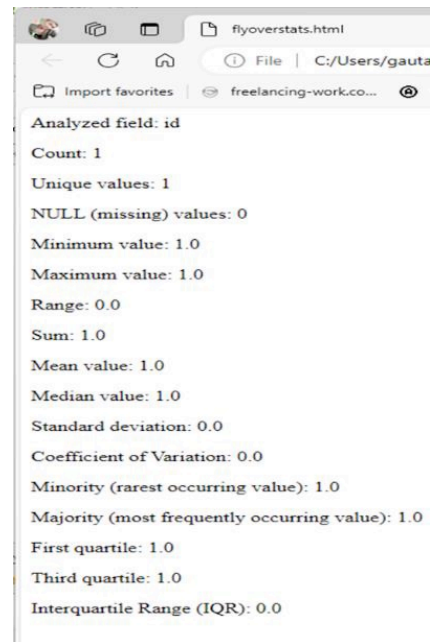
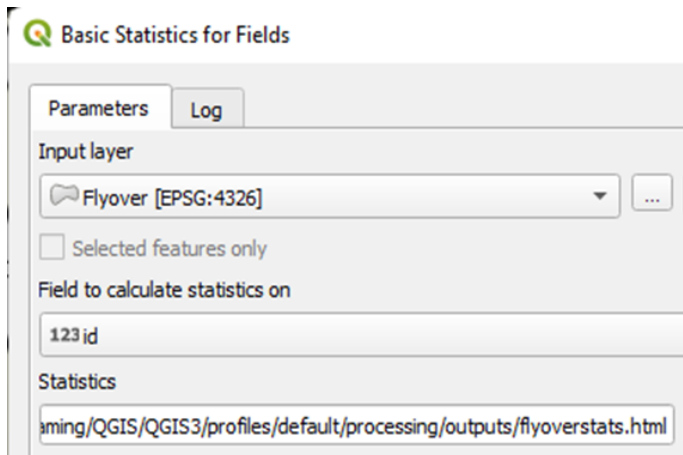
Roads –



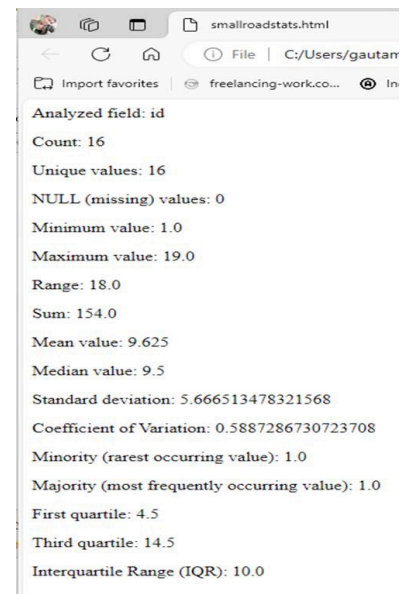
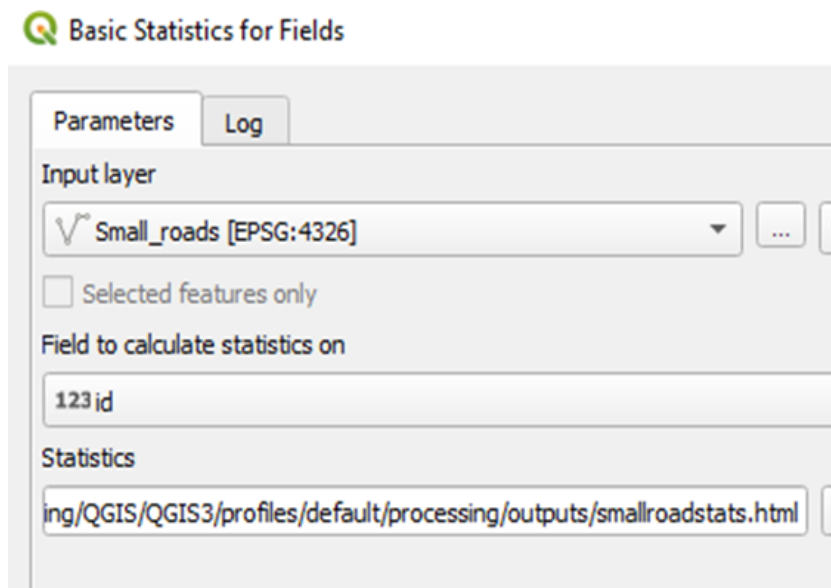
Garden –



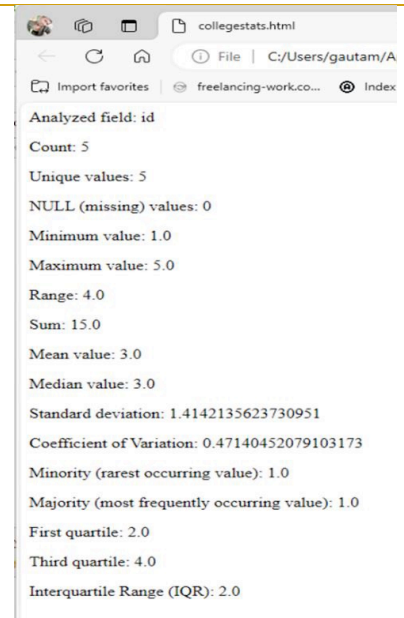
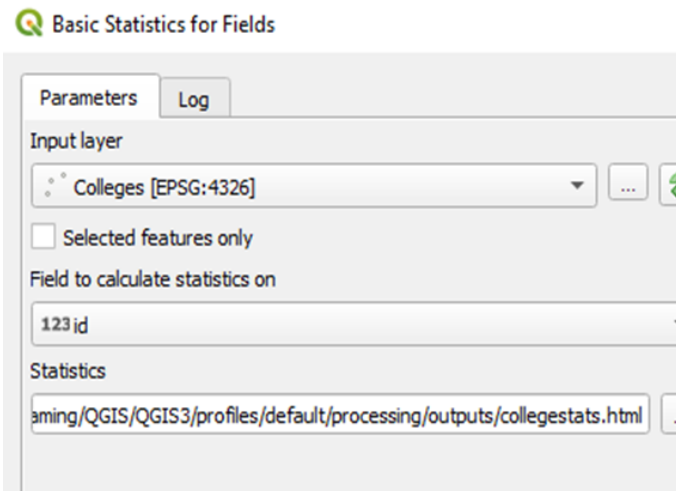
Flyover -



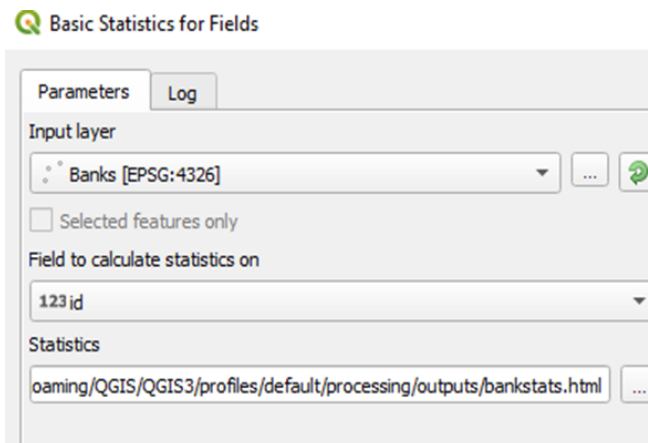
Small Roads -



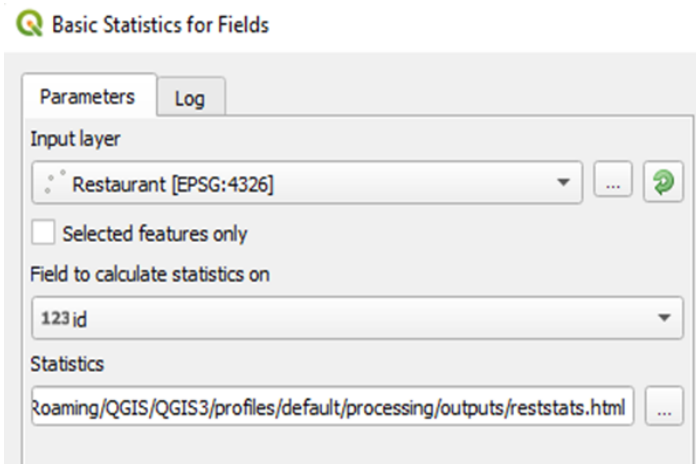
College -



Bank –



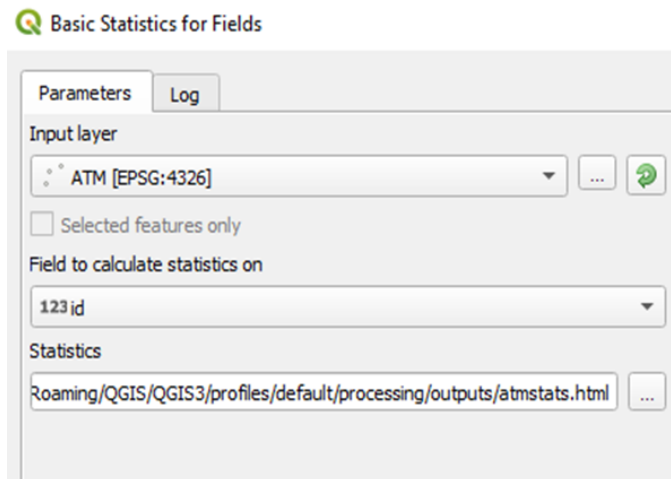
Restaurants –



```
reststats.html
C:/Users/gautam/A
Import favorites
freelancing-work.co...
Index

Analyzed field: id
Count: 9
Unique values: 9
NULL (missing) values: 0
Minimum value: 1.0
Maximum value: 9.0
Range: 8.0
Sum: 45.0
Mean value: 5.0
Median value: 5.0
Standard deviation: 2.581988897471611
Coefficient of Variation: 0.5163977794943222
Minority (rarest occurring value): 1.0
Majority (most frequently occurring value): 1.0
First quartile: 3.0
Third quartile: 7.0
Interquartile Range (IQR): 4.0
```

ATM –



```
atmstats.html
C:/Users/gautam/A
Import favorites
freelancing-work.co...
Index

Analyzed field: id
Count: 4
Unique values: 4
NULL (missing) values: 1
Minimum value: 2.0
Maximum value: 5.0
Range: 3.0
Sum: 14.0
Mean value: 3.5
Median value: 3.5
Standard deviation: 1.118033988749895
Coefficient of Variation: 0.31943828249996997
Minority (rarest occurring value): 2.0
Majority (most frequently occurring value): 2.0
First quartile: 2.5
Third quartile: 4.5
Interquartile Range (IQR): 2.0
```

Churchgate –

Basic Statistics for Fields

Parameters Log

Input layer
Churchgate [EPSG:4326]

☐ Selected features only

Field to calculate statistics on
123id

Statistics
g/QGIS/QGIS3/profiles/default/processing/outputs/churchagtestats.html

Analyzed field: id

Count: 1

Unique values: 1

NULL (missing) values: 0

Minimum value: 1.0

Maximum value: 1.0

Range: 0.0

Sum: 1.0

Mean value: 1.0

Median value: 1.0

Standard deviation: 0.0

Coefficient of Variation: 0.0

Minority (rarest occurring value): 1.0

Majority (most frequently occurring value): 1.0

First quartile: 1.0

Third quartile: 1.0

Interquartile Range (IQR): 0.0

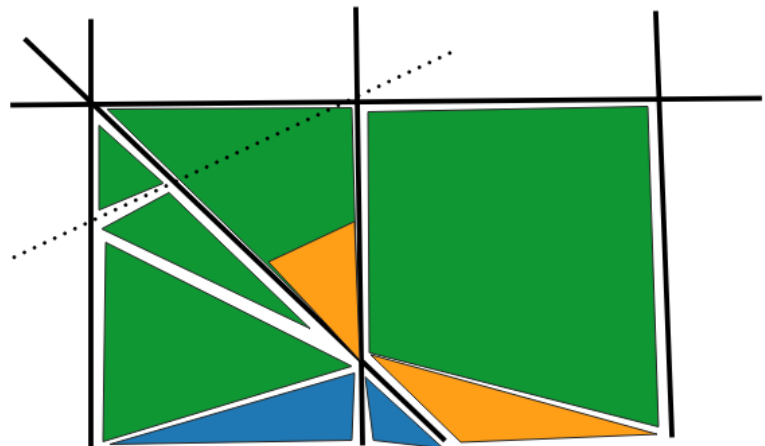
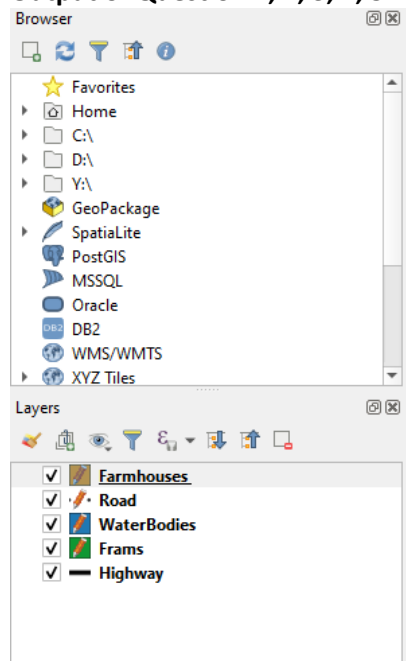
Problem Statement 5

Create a map with help of Google maps and perform the queries.

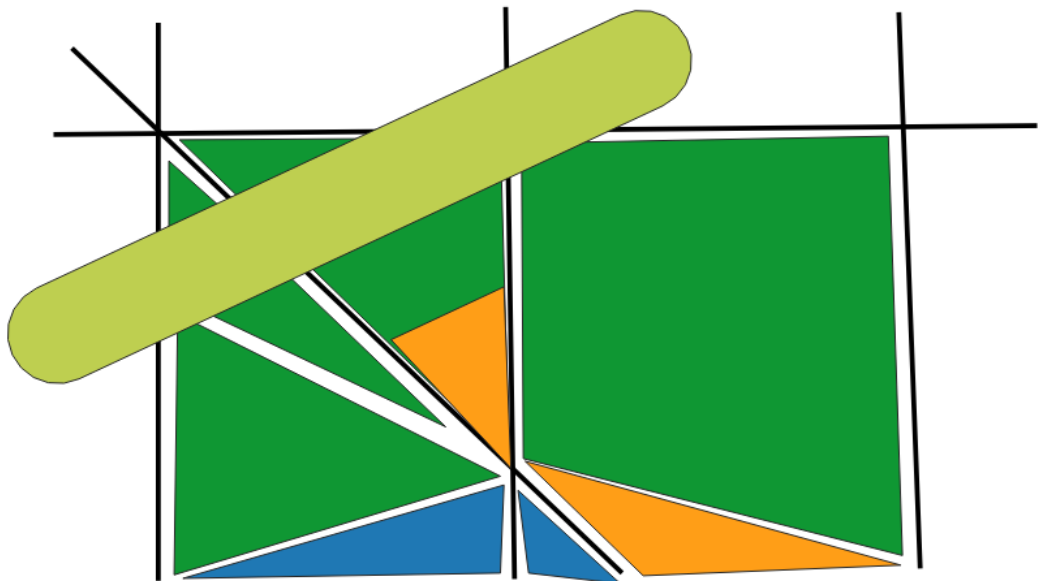
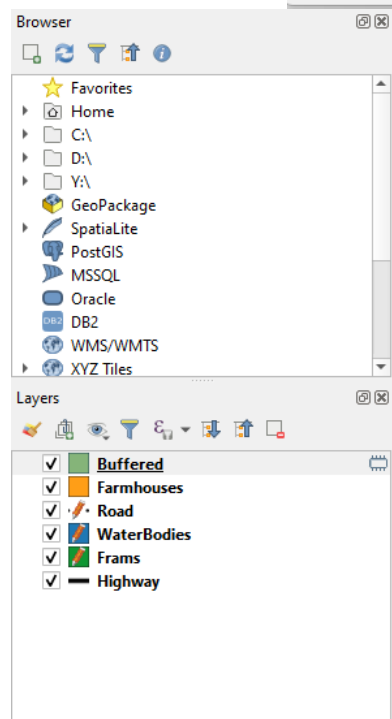
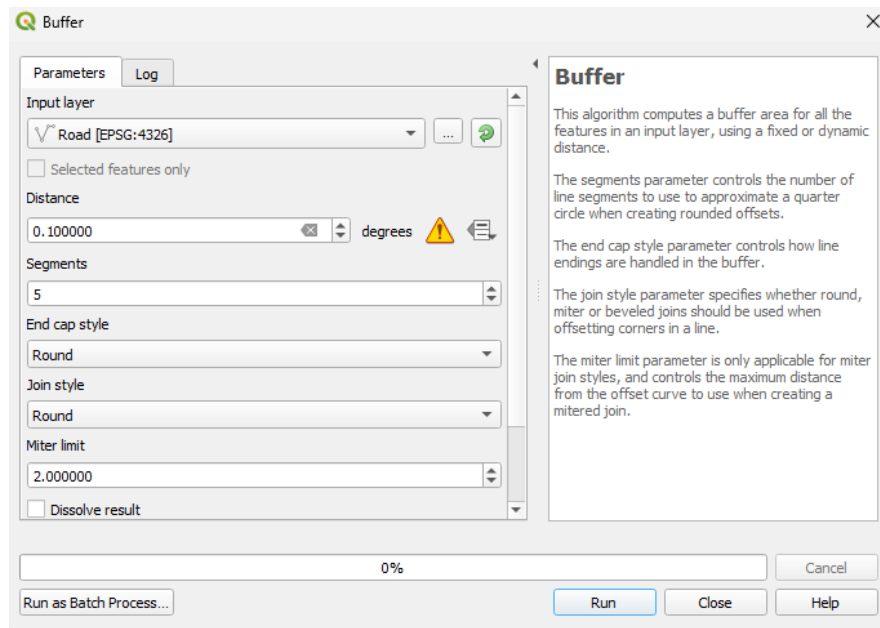
Create a map of railway route of CST to Panvel including the buildings adjacent to railway tracks. Use googles maps to find the layers. There should be minimum five layers:

1. Add 5 Highways
2. Add 5 Farms (id, own_name) (2 farms near Highway)
3. Add 2 water bodies
4. Add a main road that passes near farms and touches the highway.
5. Add 2 Farmhouses in any two farms (id, frm_id).
6. Show all the farms that are close to the highways (within 10km range).
7. Calculate area of each farm and show the smallest farm.
8. Show all the highways that passes through the water bosies.
9. Format the above layers using different styling options.

Output of Question 1, 2, 3, 4, 5 -



Question 6 -



Question 7 -

Question 8 -

Question 9 -



Spoken Tutorial
Project at
IIT Bombay

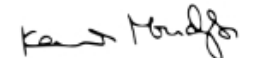
Certificate for the Completion of QGIS Training

This is to certify that **GUPTA SANJEEV** has successfully completed **QGIS** test organized at **Vidyalankar School of Information Technology (VSIT)**, by **Vmol VSIT** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

Swapnali Sawant from **Vidyalankar School of Information Technology (VSIT)**, invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 2 Score: 85.00%

February 20th 2024


Prof. Kannan M Moudgalya
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.

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