

ĆWICZENIA IV

Zadanie 1

Powierzchnia

	1	2
1	vegdesc	
2	Mixed Trees	189273

Control panel

Layers
trees

Fields

- Area
- Perimeter
- average
- count
- max
- median
- min
- stand.dev.
- sum
- unique
- variance

Filter
'Mixed Trees' = "vegdesc"

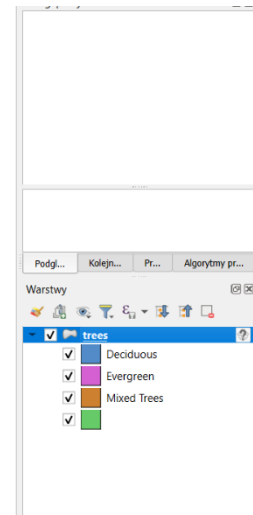
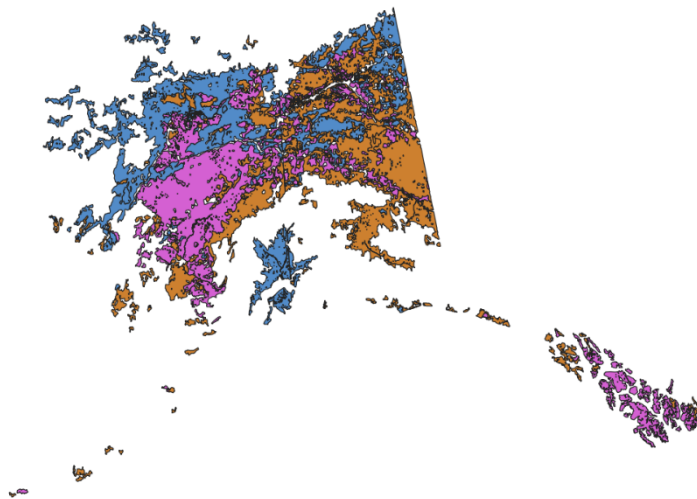
Columns

Rows
vegdesc

Value
☐ use NULL values
area_km2
sum

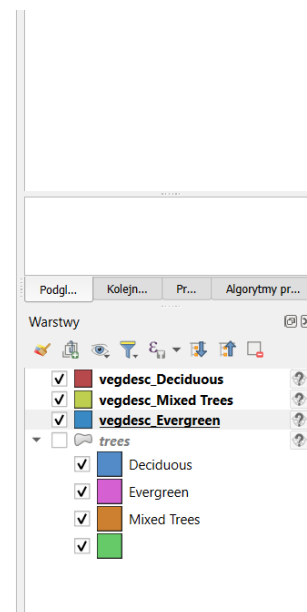
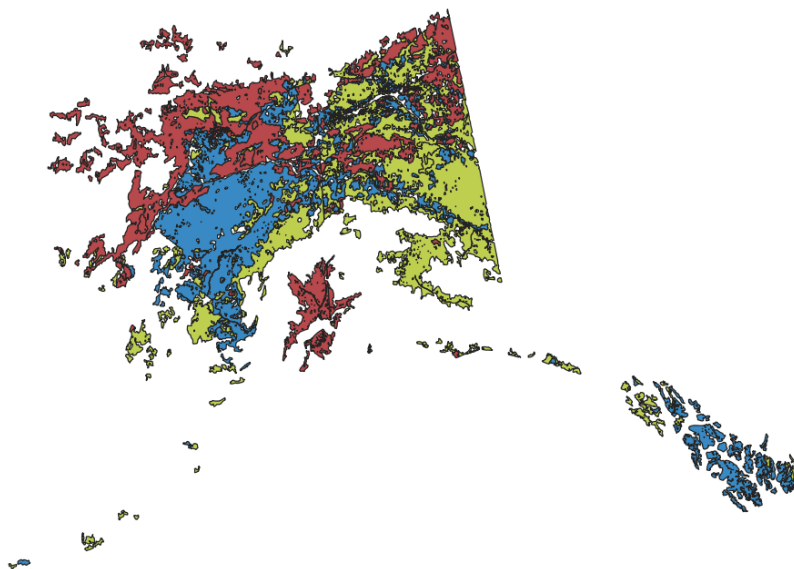
☐ Use only selected features


Calculate





Zadanie 2

Rozdzielone warstwy



 vegdesc_Deciduous.gpkg

 vegdesc_Evergreen.gpkg

 vegdesc_Mixed Trees.gpkg

Zadanie 3

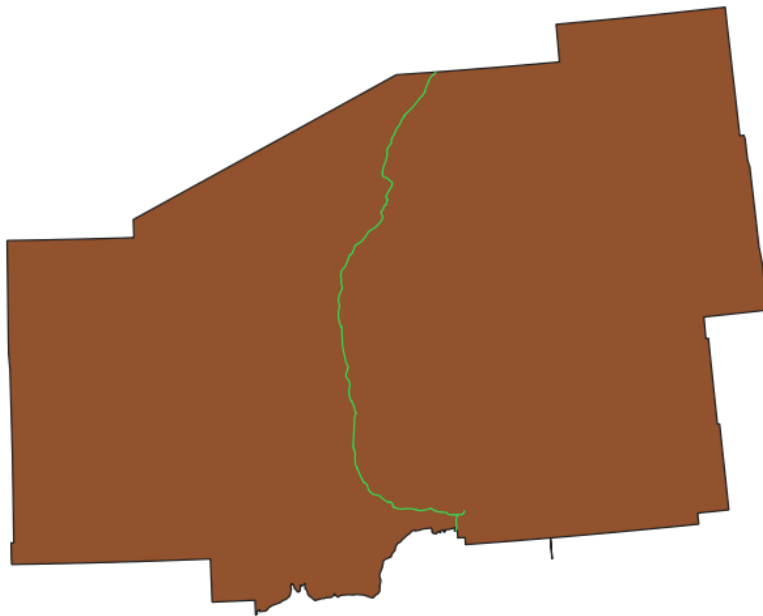
Łączna długość

```
***  
OUTPUT_HTML_FILE: C:  
\\Users\\kuban\\AppData\\Local\\Temp\\processing_owXcvG\\c7327b78a467434585851d7cec8cd0b4\\OUTPUT_HTML_FILE.html  
COUNT: 22  
UNIQUE: 22  
EMPTY: 0  
FILLED: 22  
MIN: 3334.385  
MAX: 155781.188  
CV: 0.9644253271898905  
SUM: 880923.7540000002  
MEAN: 40041.988818181824  
STD_DEV: 38617.508167308944  
RANGE: 152446.80299999999  
MEDIAN: 26301.0605  
MINORITY: 3334.385  
MAJORITY: 3334.385  
FIRSTQUARTILE: 13542.297  
THIRDQUARTILE: 52548.309  
IQR: 39006.012
```

Długość dla poszczególnych elementów

	gid	cat	exsdesc	f_code	f_codedesc	fcodesc	długość
1	5	5.0000000000...	Operational	AN010	Railroad	Single	3334.385
2	29	29.0000000000...	Operational	AN010	Railroad	Single	4516.952
3	33	33.0000000000...	Operational	AN010	Railroad	Single	5634.268
4	58	58.0000000000...	Operational	AN010	Railroad	Single	5678.184
5	8	8.0000000000...	Operational	AN010	Railroad	Single	6105.399
6	32	32.0000000000...	Operational	AN010	Railroad	Single	13542.297
7	31	31.0000000000...	Operational	AN010	Railroad	Single	16567.876
8	7	7.0000000000...	Operational	AN010	Railroad	Single	17316.227
9	60	60.0000000000...	Operational	AN010	Railroad	Single	18945.736
10	59	59.0000000000...	Operational	AN010	Railroad	Single	22445.366
11	34	34.0000000000...	Operational	AN010	Railroad	Single	23659.152
12	6	6.0000000000...	Operational	AN010	Railroad	Single	28942.969
13	30	30.0000000000...	Operational	AN010	Railroad	Single	32827.320
14	53	53.0000000000...	Operational	AN010	Railroad	Single	33202.678
15	54	54.0000000000...	Operational	AN010	Railroad	Single	47490.583
16	3	3.0000000000...	Operational	AN010	Railroad	Single	48984.656
17	57	57.0000000000...	Operational	AN010	Railroad	Single	52548.309
18	2	2.0000000000...	Operational	AN010	Railroad	Single	64535.430
19	4	4.0000000000...	Operational	AN010	Railroad	Single	70421.013
20	55	55.0000000000...	Operational	AN010	Railroad	Single	93739.920
21	1	1.0000000000...	Operational	AN010	Railroad	Single	114703.846
22	56	56.0000000000...	Operational	AN010	Railroad	Single	155781.188

Przycięty poligon



Zadanie 4

Ilość militarnych

	1	2
1	use	Military
2		8

Control panel

Layers: airports

Fields: elev, fk_region, gid, id, name, use, average, count, max, median, min, stand.dev.

Filter: "use" = 'Military'

Columns: use

Rows: count, elev

Value: ☐ use NULL values

☐ Use only selected features

Calculate

Średnia militarnych

The screenshot shows the QGIS interface with the 'airports' layer selected. The 'Fields' list on the right includes 'elev', 'fk_region', 'gid', 'id', 'name', 'use', 'average', 'count', 'max', 'median', 'min', and 'stand.dev.'. The 'Filter' box contains the expression '"use" = \'Military\''. The 'Columns' box contains the 'use' field. The 'Rows' box is empty. The 'Value' checkbox is unchecked. The 'Calculate' button is visible at the bottom right.

1	2
1	use Military
2	593.25

Lotniska spełniające warunki

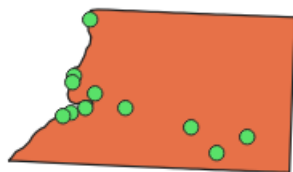
The screenshot shows the QGIS interface with the 'airports' layer selected. The 'Fields' list on the right includes 'elev', 'fk_region', 'gid', 'id', 'name', 'use', 'average', 'count', 'max', 'median', 'min', and 'stand.dev.'. The 'Filter' box contains the expression '"use" = \'Military\' AND \'elev\' < 1400'. The 'Columns' box is empty. The 'Rows' box contains the 'name' and 'use' fields. The 'Value' checkbox is unchecked. The 'Calculate' button is visible at the bottom right.

1	2	3
1	name	use
2	ALLEN AAF	Military 1167
3	BIG MOUNTAIN AFS	Military 606
4	BRYANT AHP	Military 345
5	EIELSON AFB	Military 501
6	ELMENDORF AFB	Military 192
7	NIKOLSKI AS	Military 66
8	WAINWRIGHT AAF	Military 408

Wykluczone lotnisko



Zadanie 5



Budynki spełniające warunek

	1	2
1		
2		11

Control panel

Layers

Przycięte

Fields

- cat
- f_code
- f_codedesc
- gid
- type
- average
- count
- max
- median
- min
- stand.dev.
- sum

Filter

Columns

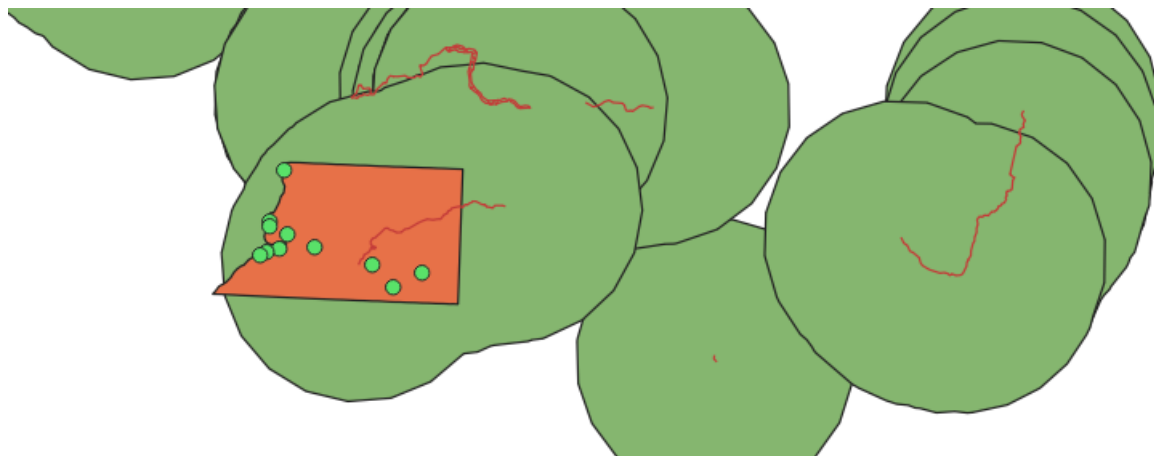
Rows

Value ☐ use NULL values

- gid
- count

Zadanie 6

Bufor

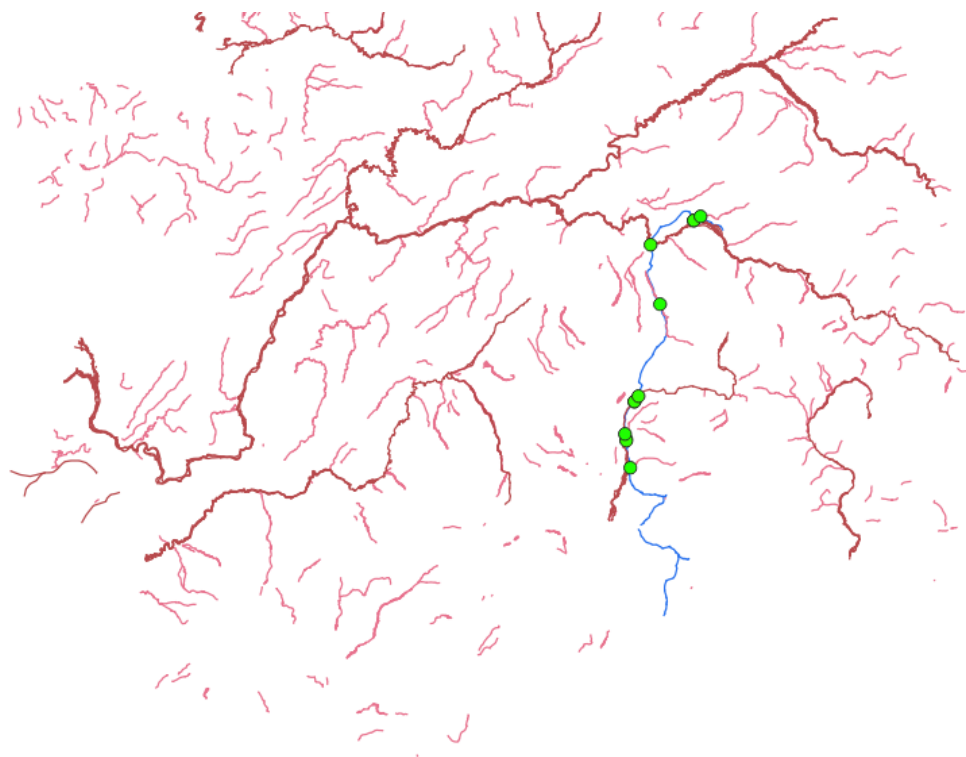


Ilość budynków

	1 ▲	2
1		
2		11

Zadanie 7

Punkty przecięcia



Zadanie 8

Ilość węzłów

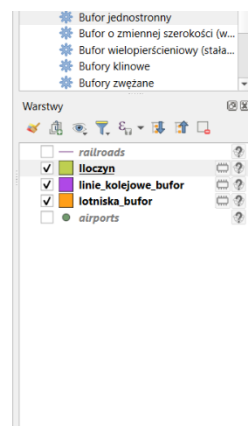
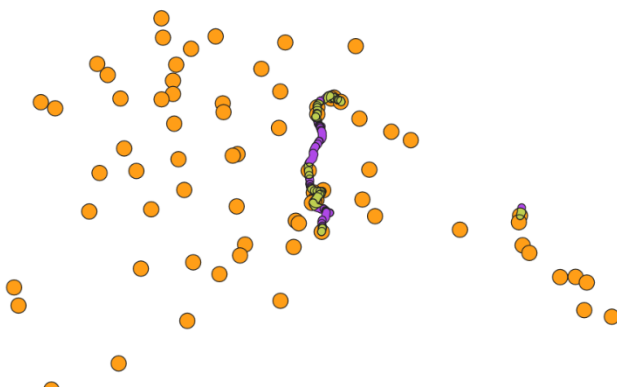
	1	2
1		
2		662

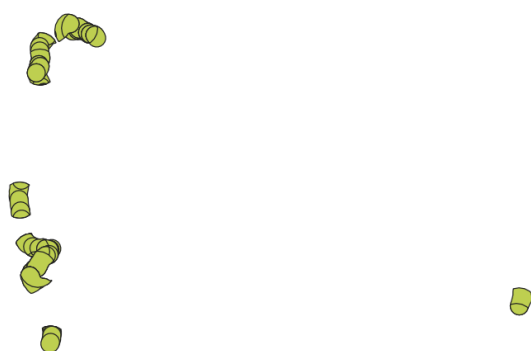
Węzły



Zadanie 9

Lokalizacje hoteli





Zadanie 10

Oryginalna geometria

Ilość punktów

```
num_points( $geometry)
```

= + - / * ^ || () '\n'

Obiekt Marsh/Swamp

Podgląd: 315

Powierzchnia

```
sum(area($geometry))
```

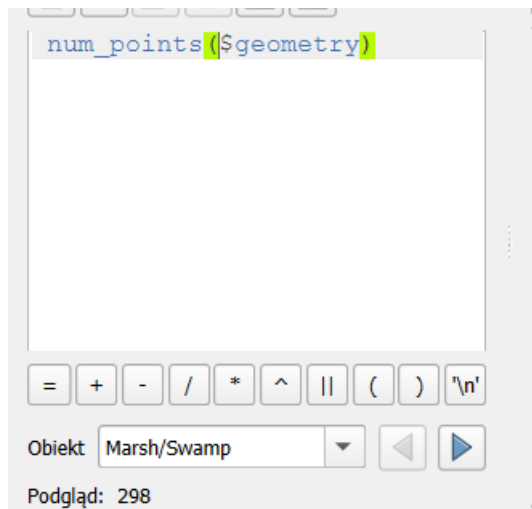
= + - / * ^ || () '\n'

Obiekt Marsh/Swamp

Podgląd: 266080392628.23587

Geometria po uproszczeniu

Ilość punktów



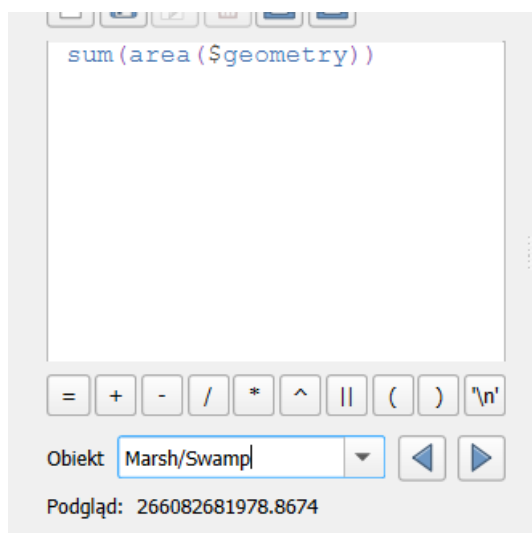
num_points(\$geometry)

= + - / * ^ || () '\n'

Obiekt Marsh/Swamp

Podgląd: 298

Powierzchnia



sum(area(\$geometry))

= + - / * ^ || () '\n'

Obiekt Marsh/Swamp

Podgląd: 266082681978.8674