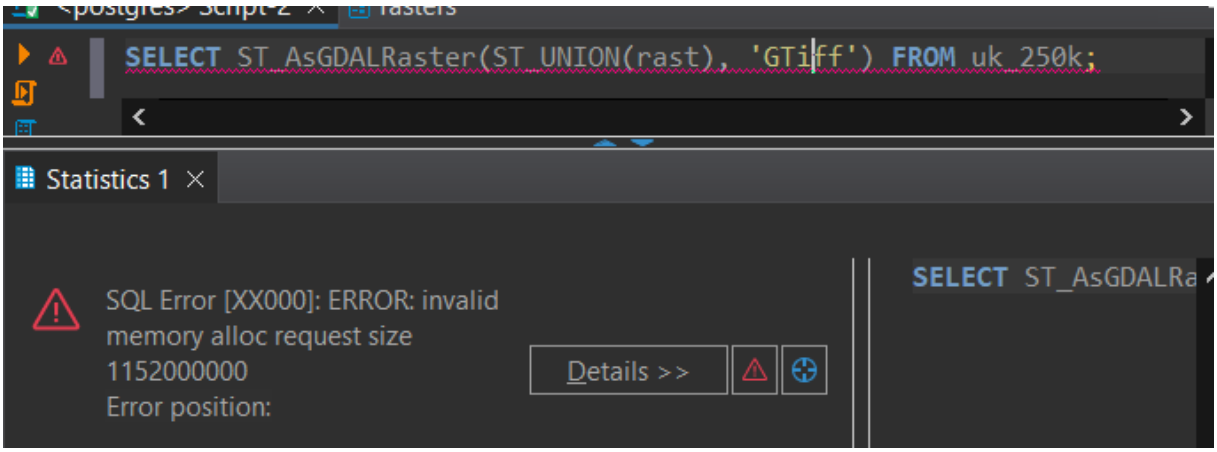
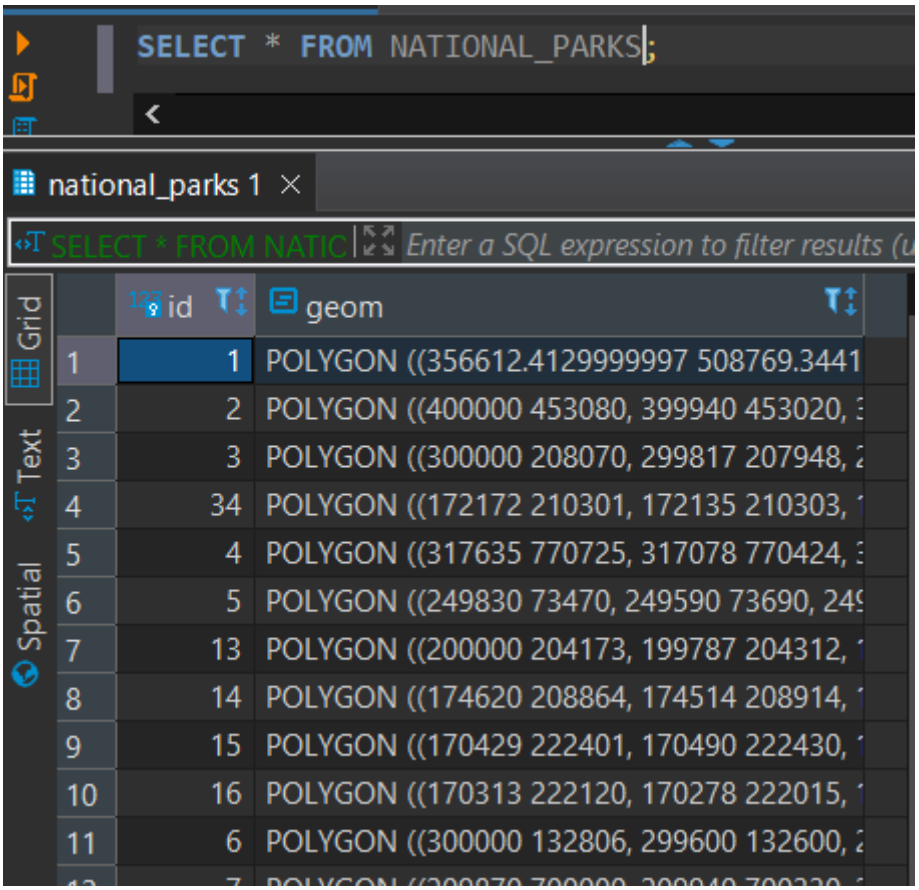
Zad 2

```
C:\Program Files\PostgreSQL\14\bin>raster2pgsql -e "C:\Users\szymc\Downloads\ras250_gb\data\*.tif" uk_250k | psql -d lab
7 -h localhost -U postgres -p 5432
Processing 1/56: C:\Users\szymc\Downloads\ras250_gb\data\HP.tif
```

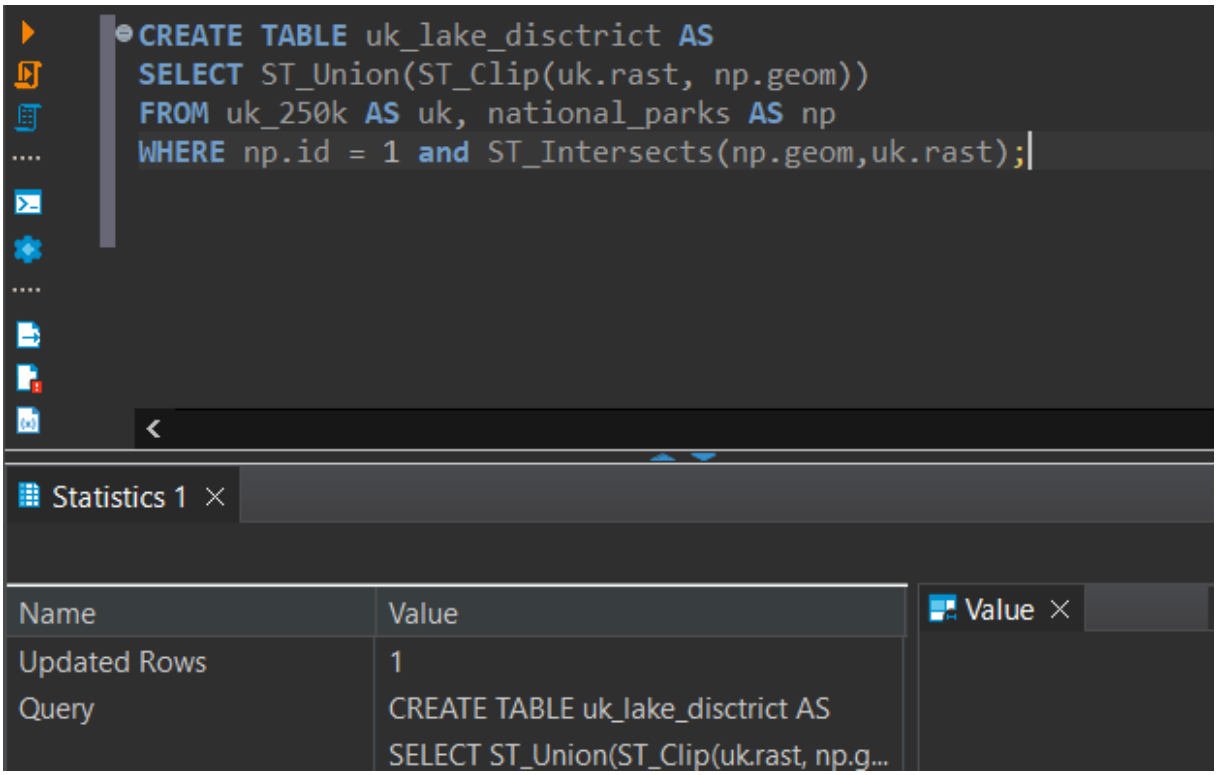
Zad 3



Zad 5


SELECT * FROM NATIONAL_PARKS;
national_parks 1
SELECT * FROM NATIC
Enter a SQL expression to filter results (u
Grid
Text
Spatial
id
geom
1 1 POLYGON ((356612.4129999997 508769.3441
2 2 POLYGON ((400000 453080, 399940 453020,
3 3 POLYGON ((300000 208070, 299817 207948,
4 34 POLYGON ((172172 210301, 172135 210303,
5 4 POLYGON ((317635 770725, 317078 770424,
6 5 POLYGON ((249830 73470, 249590 73690,
7 13 POLYGON ((200000 204173, 199787 204312,
8 14 POLYGON ((174620 208864, 174514 208914,
9 15 POLYGON ((170429 222401, 170490 222430,
10 16 POLYGON ((170313 222120, 170278 222015,
11 6 POLYGON ((300000 132806, 299600 132600,

Zad 6


CREATE TABLE uk_lake_disctrict AS
SELECT ST_Union(ST_Clip(uk.rast, np.geom))
FROM uk_250k AS uk, national_parks AS np
WHERE np.id = 1 and ST_Intersects(np.geom,uk.rast);
Statistics 1
Name
Value
Updated Rows
1
Query
CREATE TABLE uk_lake_disctrict AS
SELECT ST_Union(ST_Clip(uk.rast, np.g...
Value

Zad 7

```
CREATE TABLE tmp_out_tiff AS
 SELECT lo_from_bytea(0, ST_AsGDALRaster(ST_Union(st_union),'GTiff')
 FROM uk_lake_disctrict;

SELECT lo_export(lfb, 'uk_lake_district.tiff')
 FROM tmp_out_tiff;

 SELECT lo_unlink(lfb)FROM tmp_out_tiff;
```

Zad 9

```
C:\Program Files\PostgreSQL\14\bin>raster2pgsql -e -t 8192x8192 "C:\Users\szymc\Downloads\WETRAN~1\S2B_MS~1\S2B_MS~1.SAF
\GRANULE\L1C_T3~1\IMG_DATA\*.jp2" sentinel | psql -d lab7 -h localhost -U postgres -p 5432
Processing 1/14: C:\Users\szymc\Downloads\WETRAN~1\S2B_MS~1\S2B_MS~1.SAF\GRANULE\L1C_T3~1\IMG_DATA\T30UVF_20221130T11231
```

Zad 10

```
CREATE TABLE ndvi as SELECT ST_MapAlgebra(r.rast, 1, r.rast, 4,
'([rast2.val] - [rast1.val]) / ([rast1.val] + [rast2.val])::float', '32BF') AS rast
FROM (SELECT s.rid, ST_Clip(s.rast, np.geom) as rast from
sentinel s, NATIONAL_PARKS NP where st_intersects(np.geom,s.rast) and np.id=1) as r;
```

Zad 11

```
CREATE TABLE ndvi_union AS
 SELECT ST_Union(ST_Clip(n.rast, np.geom))
 FROM ndvi AS n, national_parks AS np
 WHERE np.id = 1 and ST_Intersects(np.geom,n.rast);

CREATE TABLE tmp_out2 AS
 SELECT lo_from_bytea(0, ST_AsGDALRaster(ST_Union(st_union), 'GTiff')
  ) AS lfb
 FROM ndvi_union;

SELECT lo_export(lfb, 'ndvi.tiff')
 FROM tmp_out2;

SELECT lo_unlink(lfb)
 FROM tmp_out2;
```

Nie udało się. Po przycięciu do national_parks była pusta tabela.