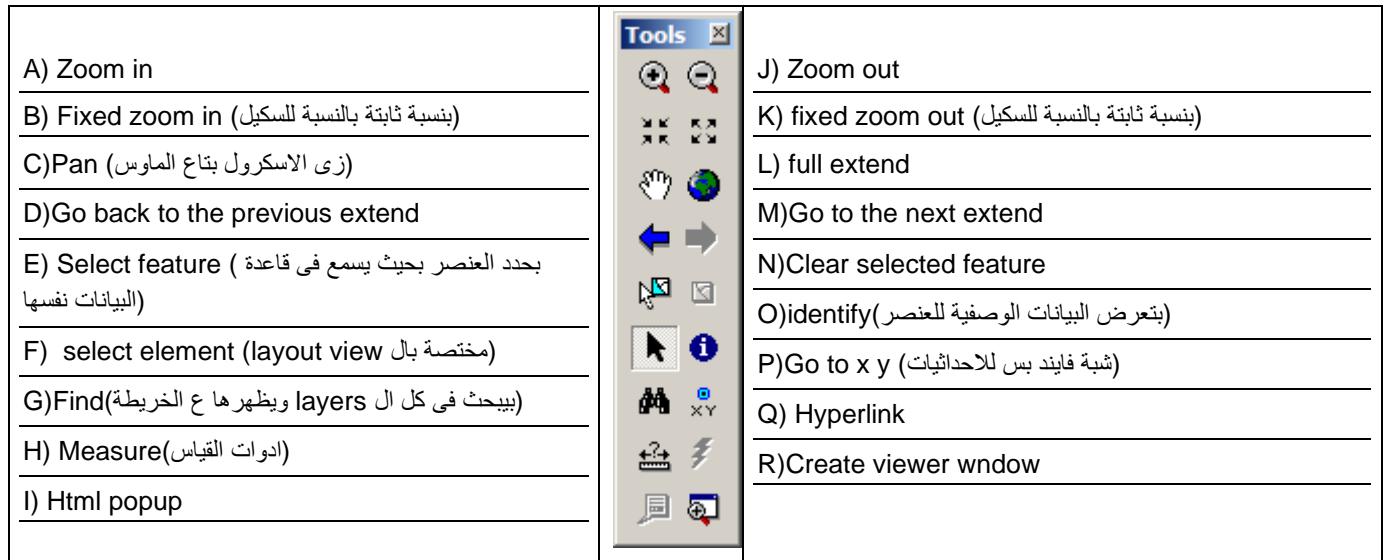


# Intro to Mapping and GIS

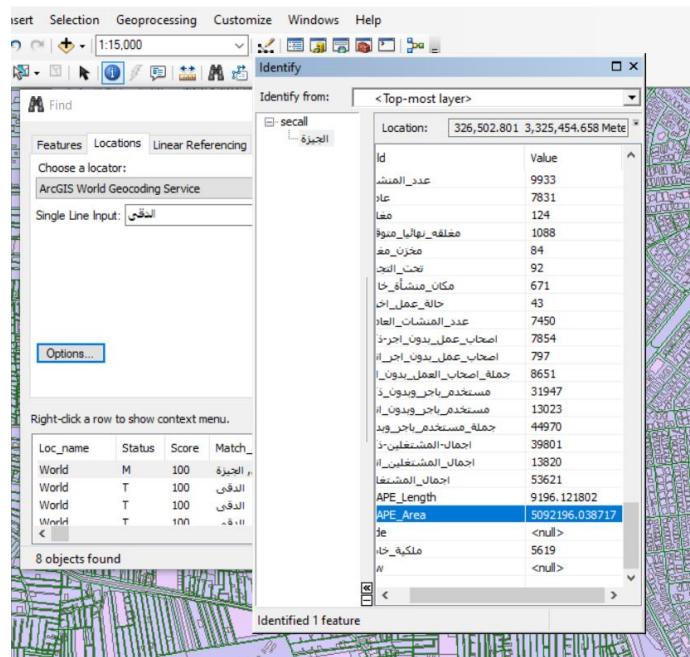
## Lab Exercise #1 Introduction to ArcMap and data query

**Q1:** This graphic represents the *Tools* toolbar. Hover your mouse pointer over each tool to see what it is named. Match the name with each tool's icon.



**Q2:** According to the Identify tool, What is the area of El Dokki and what is your location in Degrees Minutes, Seconds and in Meters?

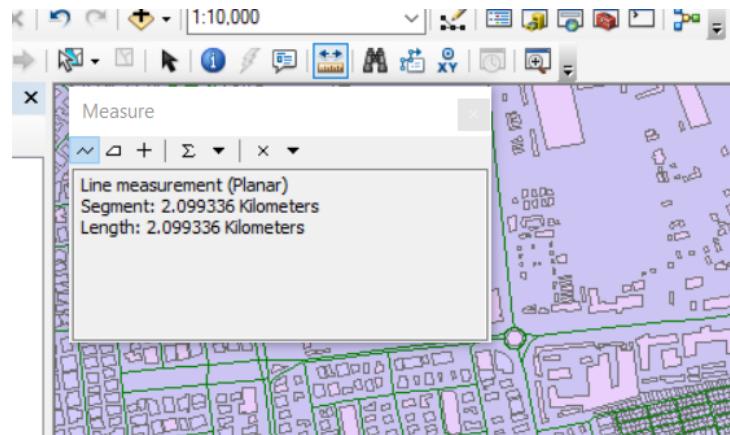
Area: 5092196.038717



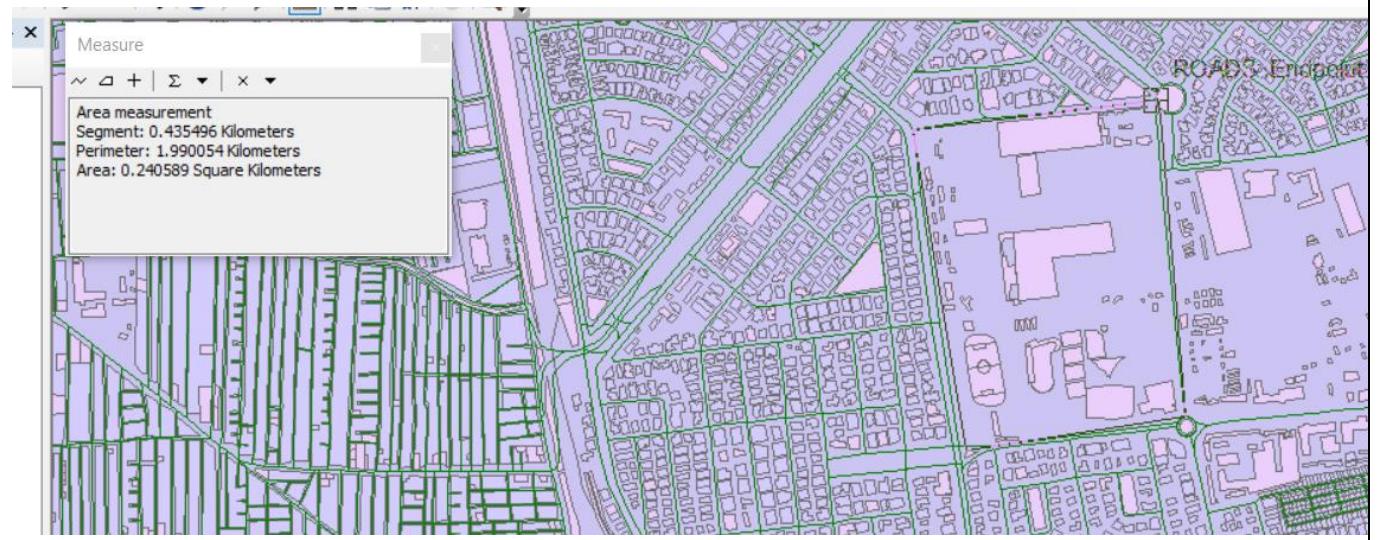
Location (meters): 326,502.801 3,325,454.658 Meters

Location (Degree minutes seconds) : 31°12'1.478"E 30°2'52.342"N

**Q3** Using the line measurement tool, how long is Eltahrir street in Km?

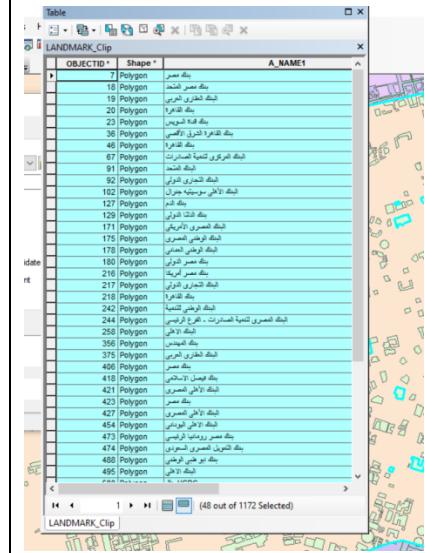


**Q4** Using the polygon measurement tool, what is the Area of Elsaid club in Km square?

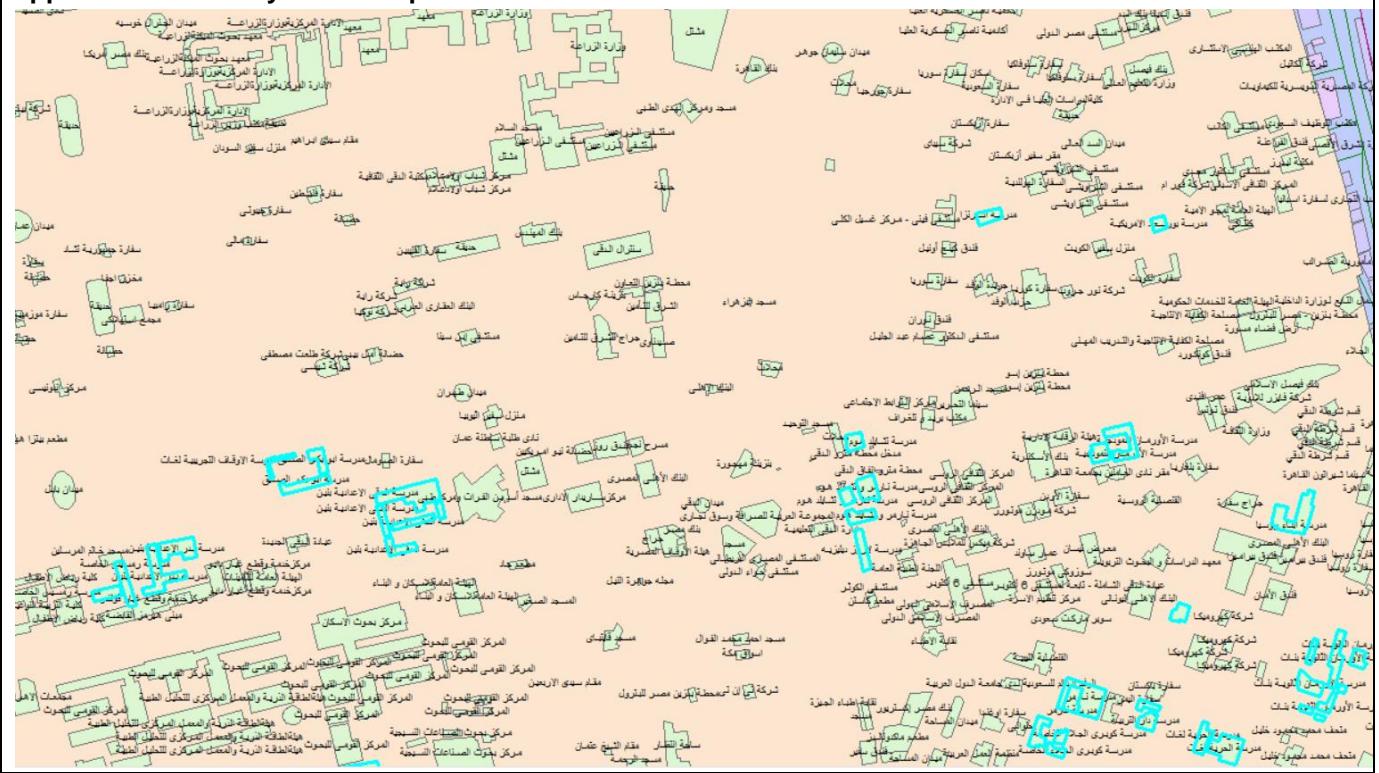


**Q5** The “Shape\_area” Field explains the area of each bank in eldokki. How many Banks Located in Eldokki?

48 Banks



**Q6:Using the Select Features tool ,click on some of the schools on Eldokki. Notice that selected features appear outlined in cyan . Make print screen for this selected school**



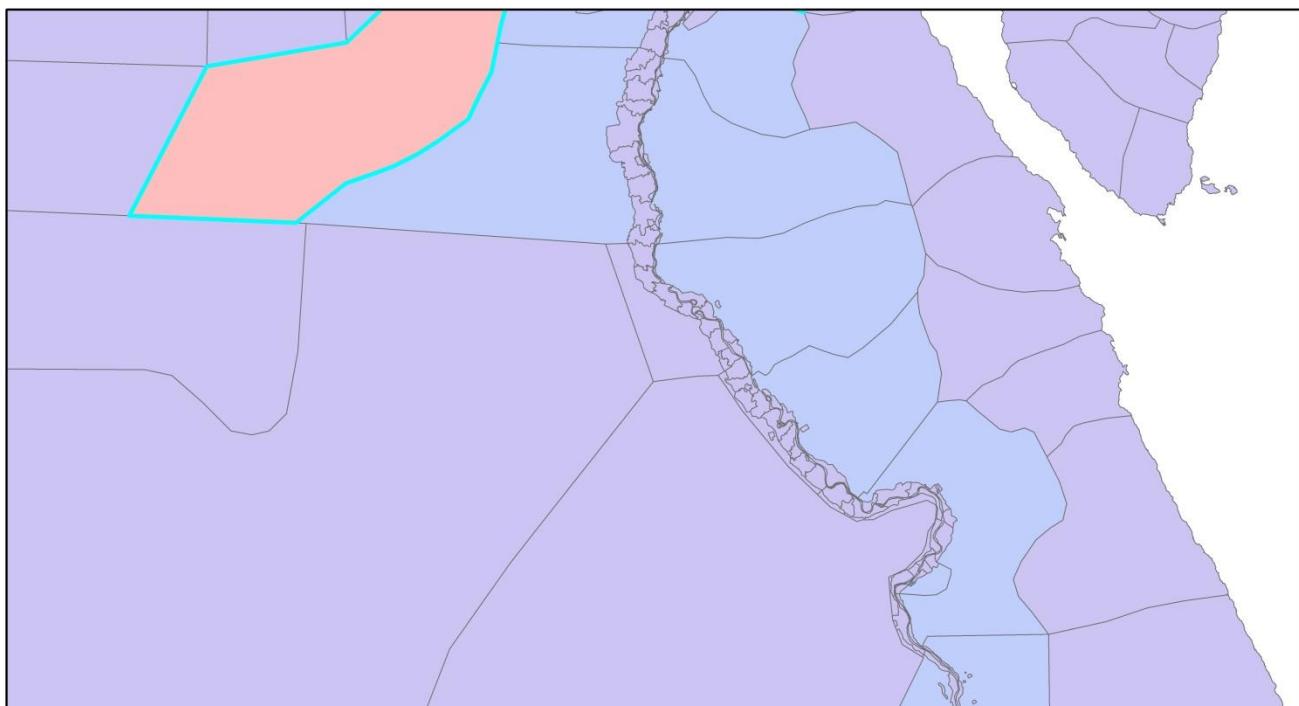
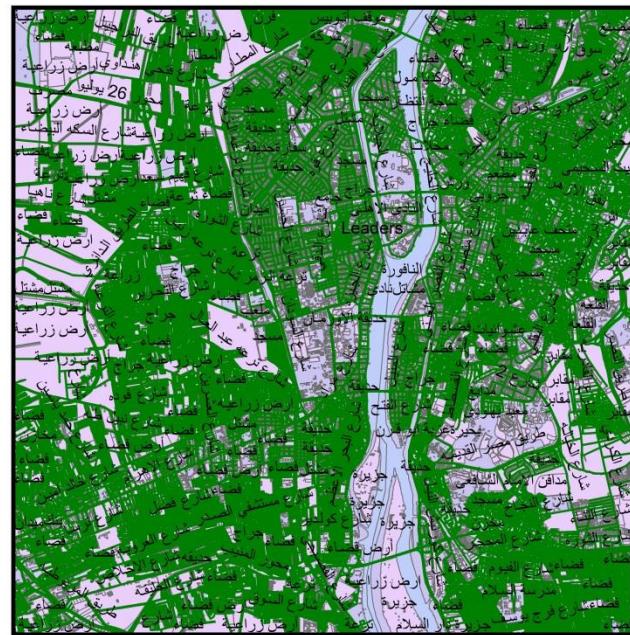
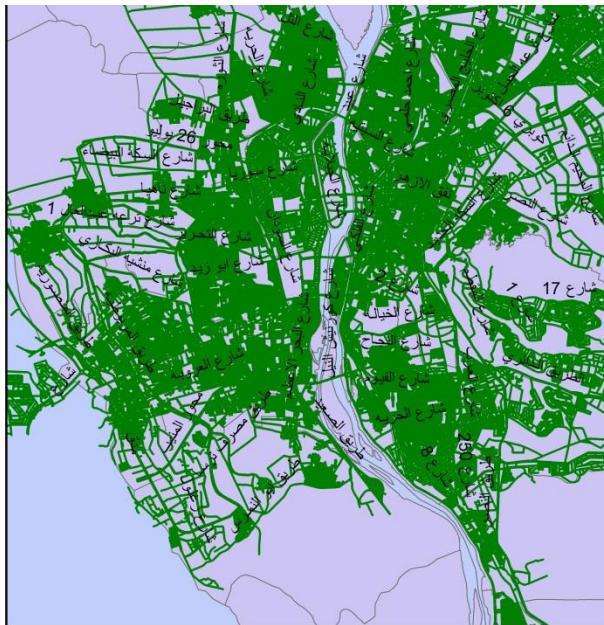
**Q7:Select all hotels from Landmark layers where the area is >1500m square print screen of the map with the selecting feature**

Table

Hotels>1500

OBJECTID *	Shape *	A_NAME1
211	Polygon	فندق ماريوت ميراج سينات
1427	Polygon	فندق وشنجة المأموني مجمع واف بسيط
5802	Polygon	فندق سويزور
6181	Polygon	فندق بيريز
7391	Polygon	فندق بور بريست
7479	Polygon	فندق الرمالية للسباحة والترفيه
7616	Polygon	فندق ماريوت
7835	Polygon	فندق ماريوت
8286	Polygon	فندق غرينون الجوزاء
9923	Polygon	فندق دارجيه هاوس
10086	Polygon	فندق فور
10600	Polygon	فندق شيراتون طرابلس
10601	Polygon	فندق شيراتون طرابلس
10603	Polygon	فندق شيراتون طرابلس
10605	Polygon	فندق شيراتون طرابلس
10764	Polygon	فندق شيراتون طرابلس
10774	Polygon	فندق شيراتون طرابلس
11019	Polygon	فندق الابل
11040	Polygon	فندق ميريس
12309	Polygon	فندق هيلز
12380	Polygon	فندق موريبيان
12673	Polygon	فندق فورتون
13361	Polygon	فندق فورتون
15181	Polygon	فندق الجبل الأقصى للفلل الساحلية
16439	Polygon	فندق ميريدان طرابلس
16470	Polygon	فندق سوتا
18482	Polygon	فندق الجادة للتراث والسلاسل
25038	Polygon	فندق سويان
25700	Polygon	فندق بيل ابر
33223	Polygon	فندق كوكور
33863	Polygon	فندق هيلتون طرابلس
38359	Polygon	فندق جوس
38393	Polygon	فندق مكفارن
38691	Polygon	فندق كلارينج - حديقة مصر للقانون
38756	Polygon	فندق الجبل

**Q8: Export your images in JPEG format with resolution 700dpi after putting all map components (verbal scale-north arrow – legend- date of production-Inset and locator map-Neat line-projection-and cartographer)**



#### Legend

- gov giza
- ROADS
- secall
- shykha
- gov
- shykha\_Intersect

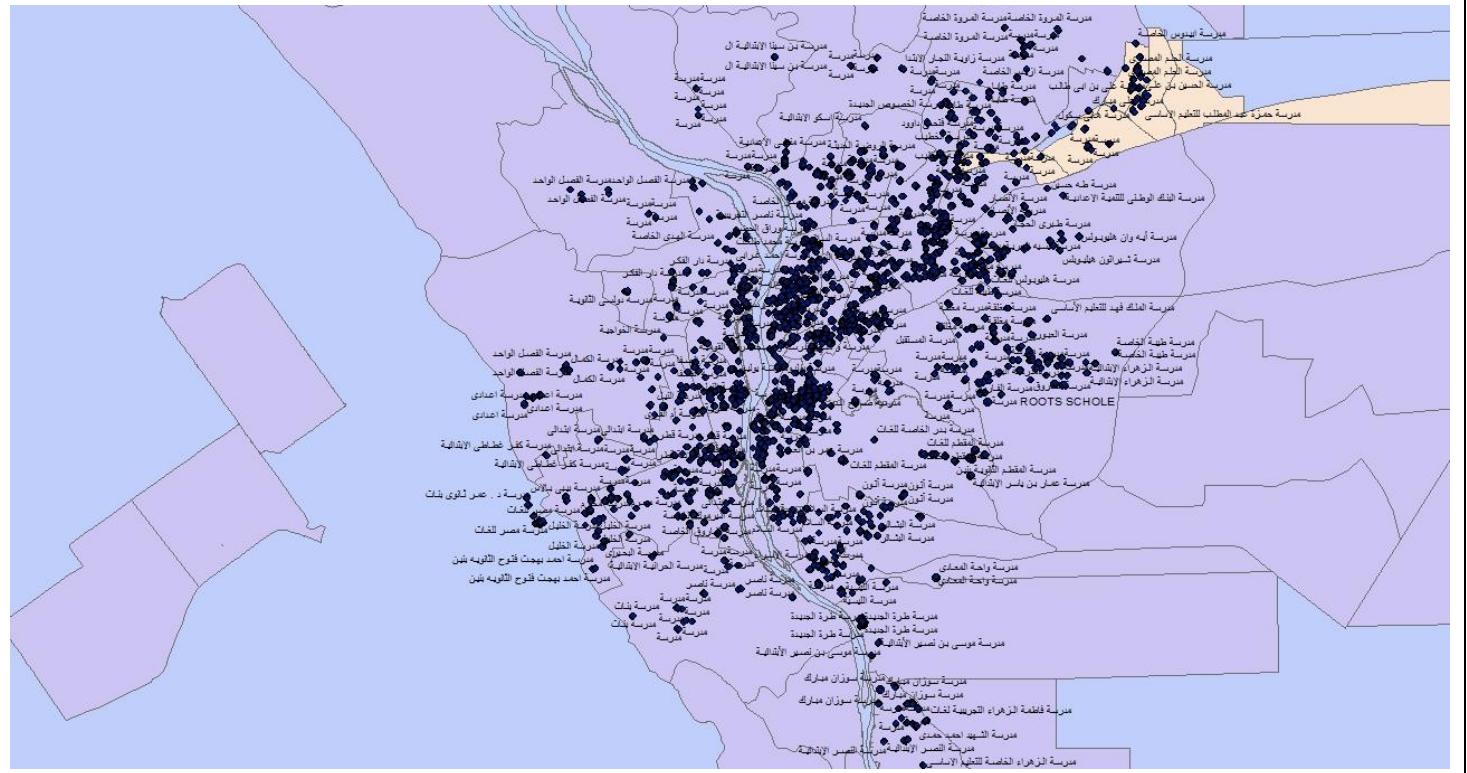
1 centimeter = 40 kilometers

100      50      0      100 Kilometers



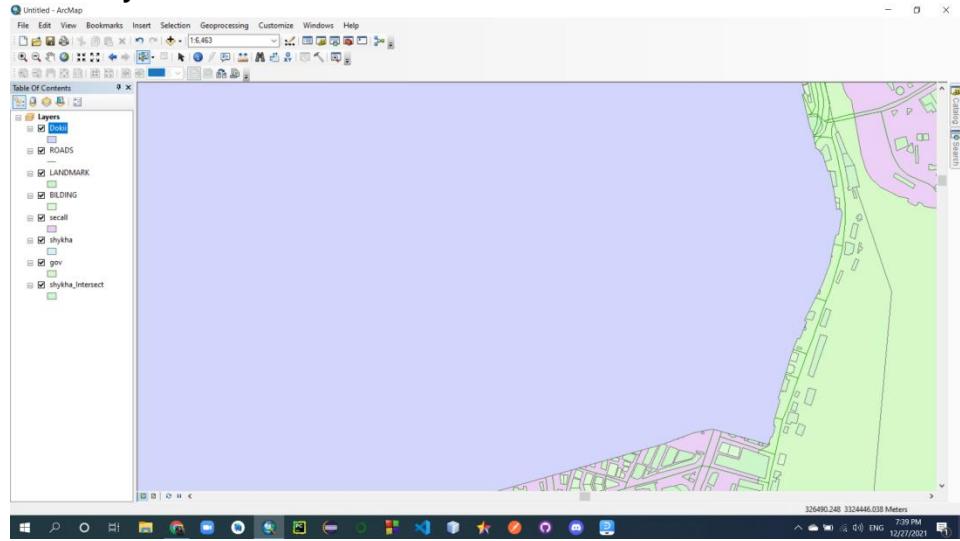
Rehab Mohamed

**Q9: Using ArcToolbox select all school and export it into Do\_school layer convert the Do\_school layer into point layer and export your map in PDF format with nominal representation**

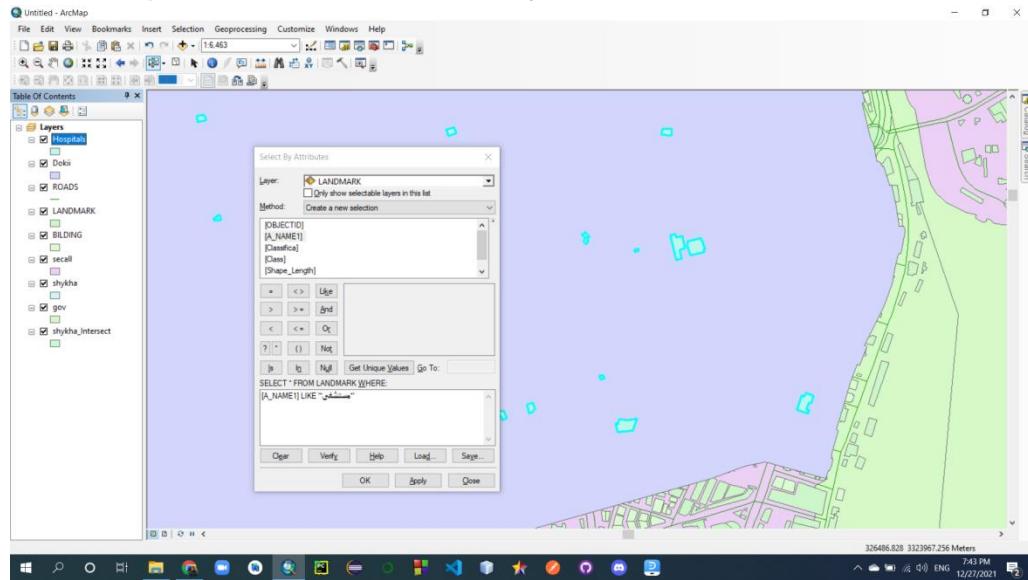


# Lab Exercise #2

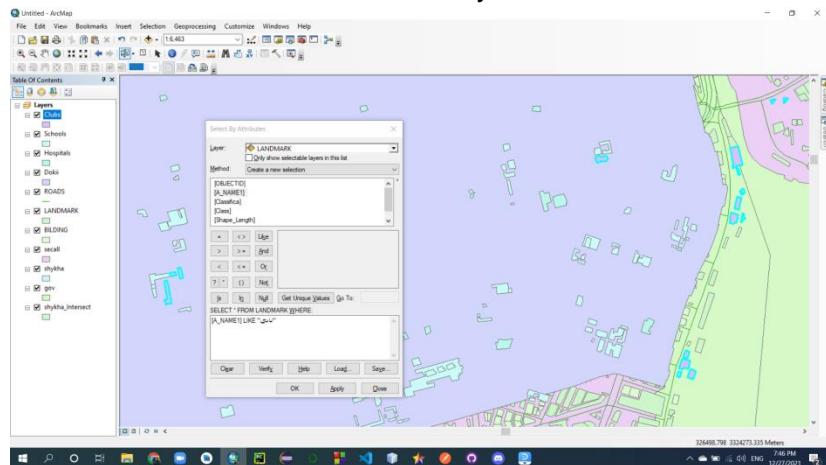
## 1) Create layer for dokii



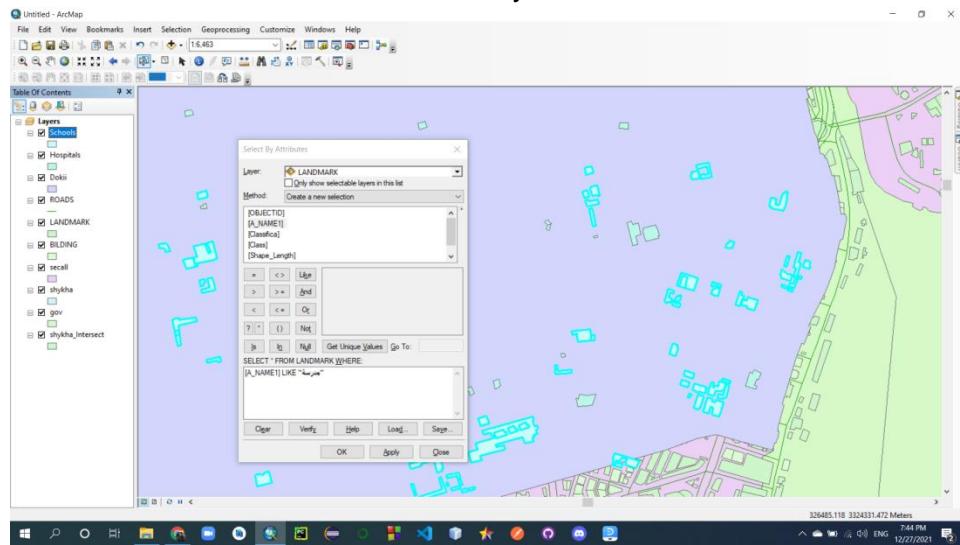
## 2) select Hospitals from dokii and add to layer



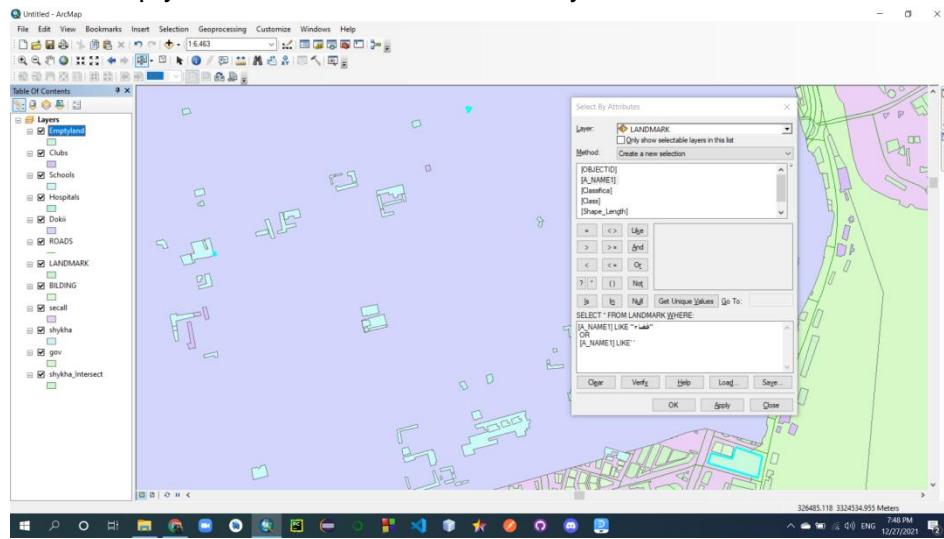
## 3) select clubs from dokii and add to layer



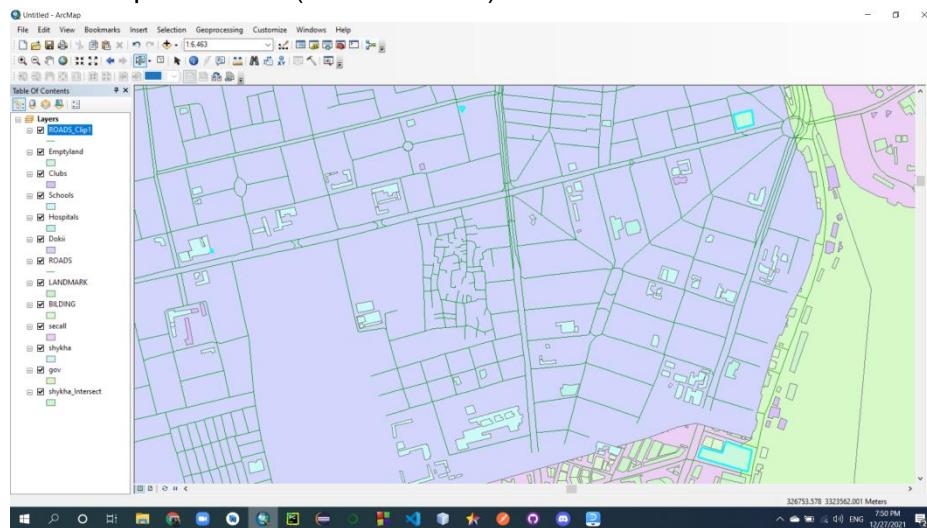
4) select Schools from dokii and add to layer



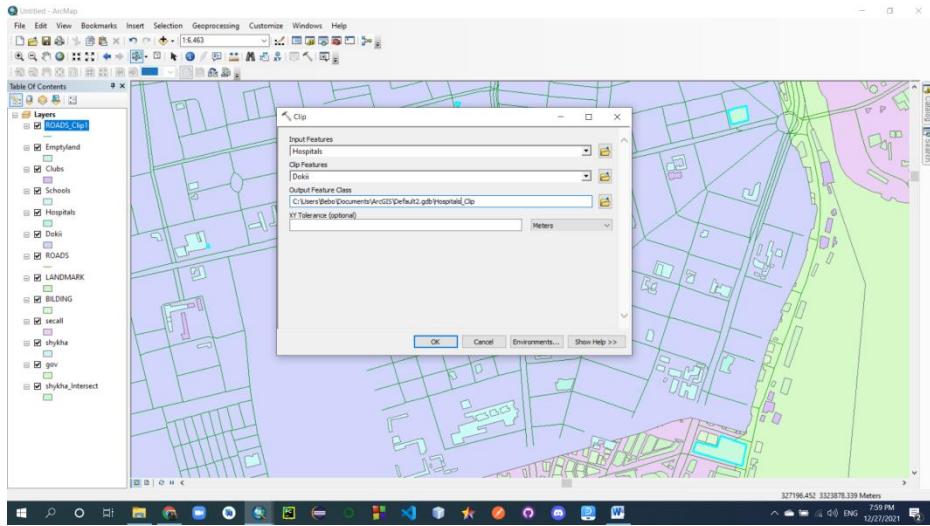
5) select Empty lands from dokii and add to layer



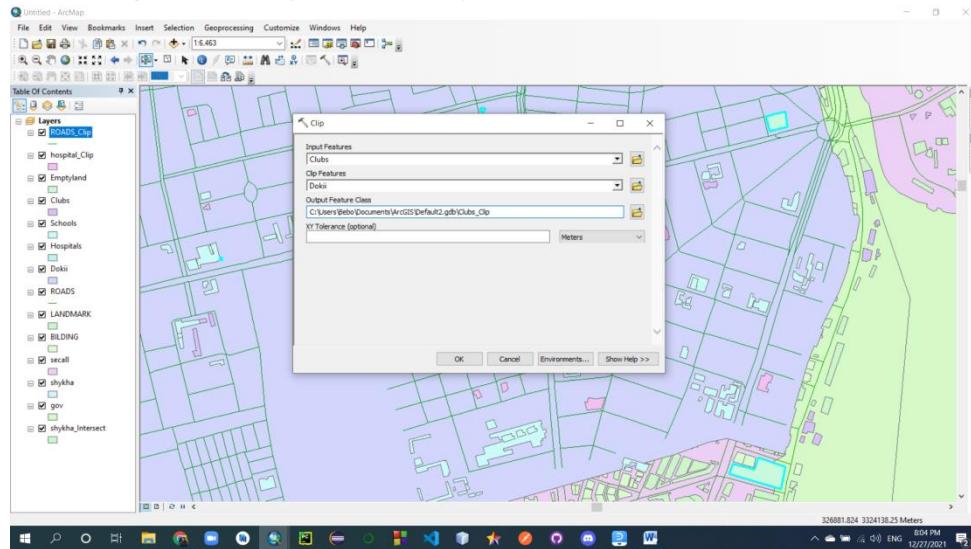
6) Create clip for Roads (Roads in dokii)



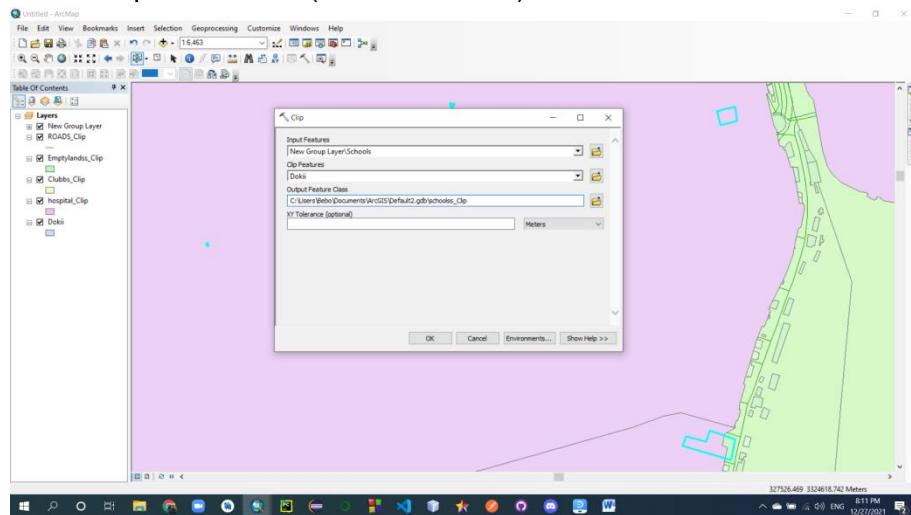
## 7) Create clip for Hospitals (hospitals in dokii)



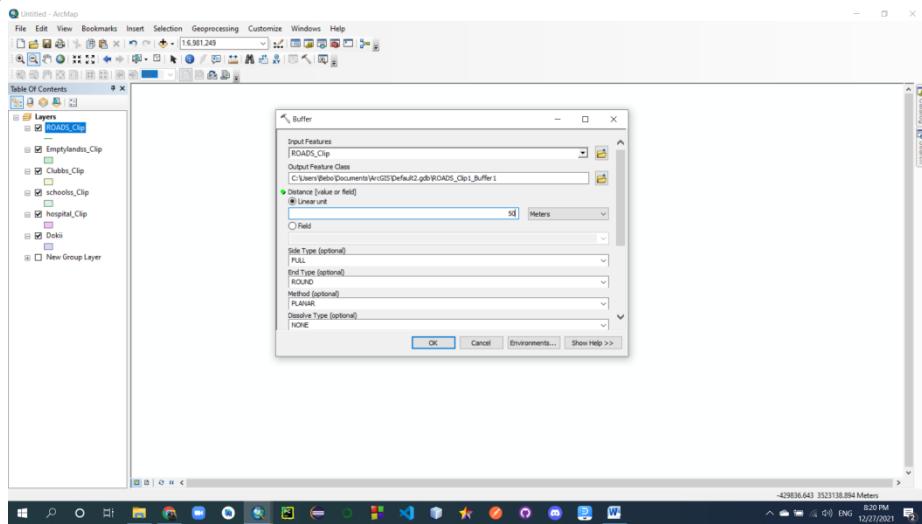
## 8) Create clip for Clubs (clubs in dokii)



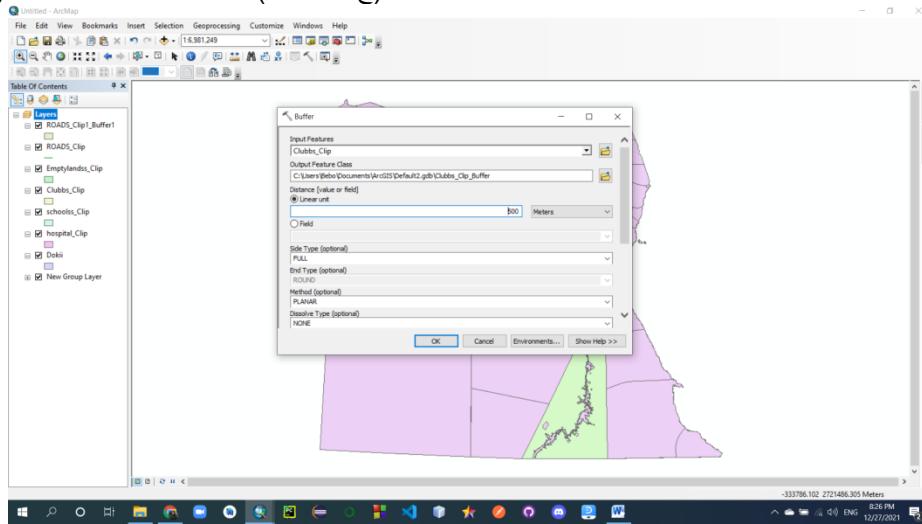
## 9) Create clip for schools (schools in dokii)



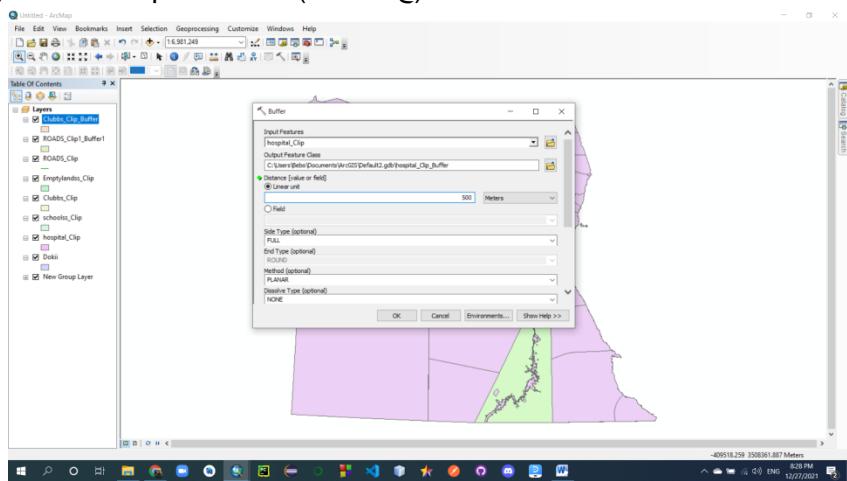
## 10)Create Roads buffer



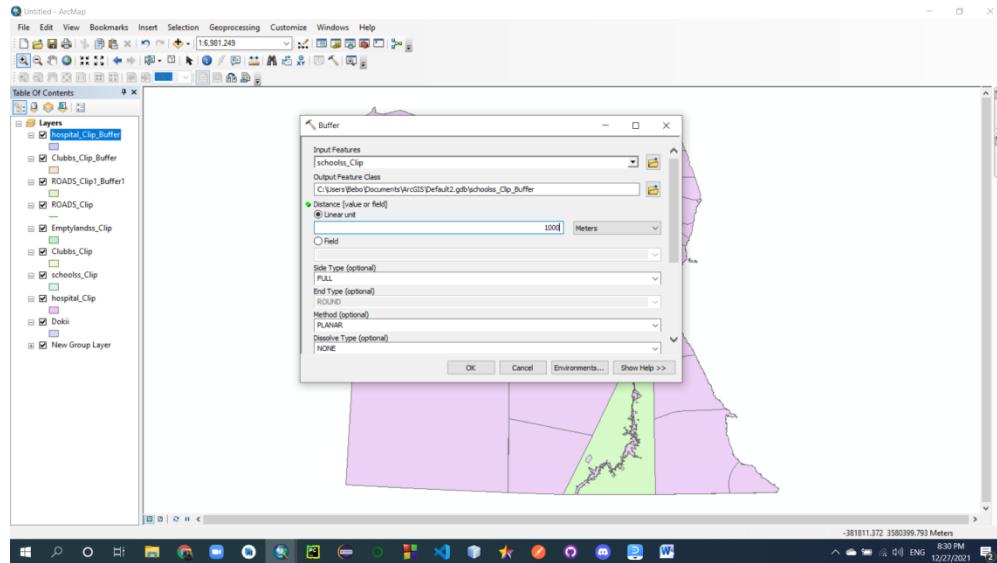
## 11)Create Club buffer (500 متر)



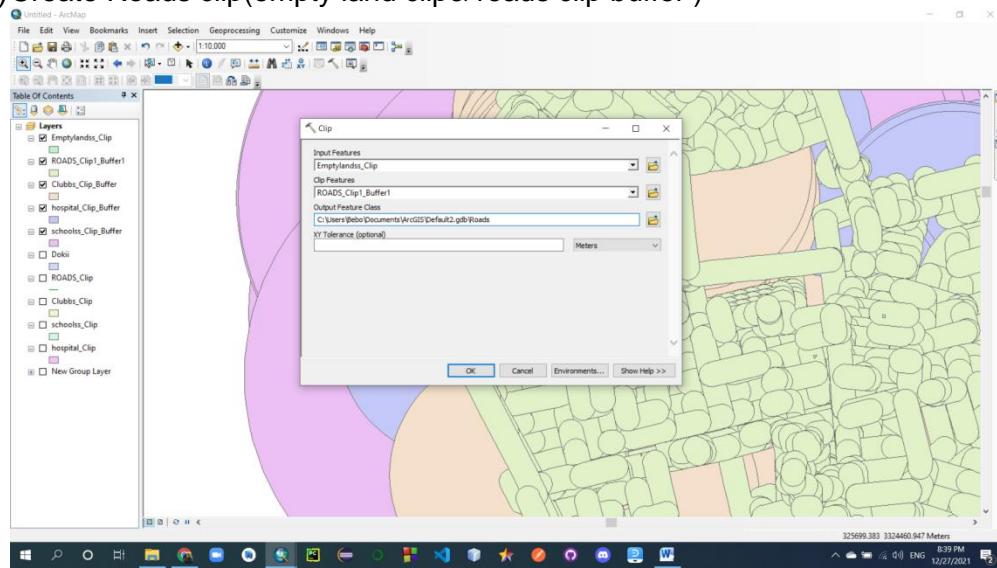
## 12)Create hospital buffer (500 متر)



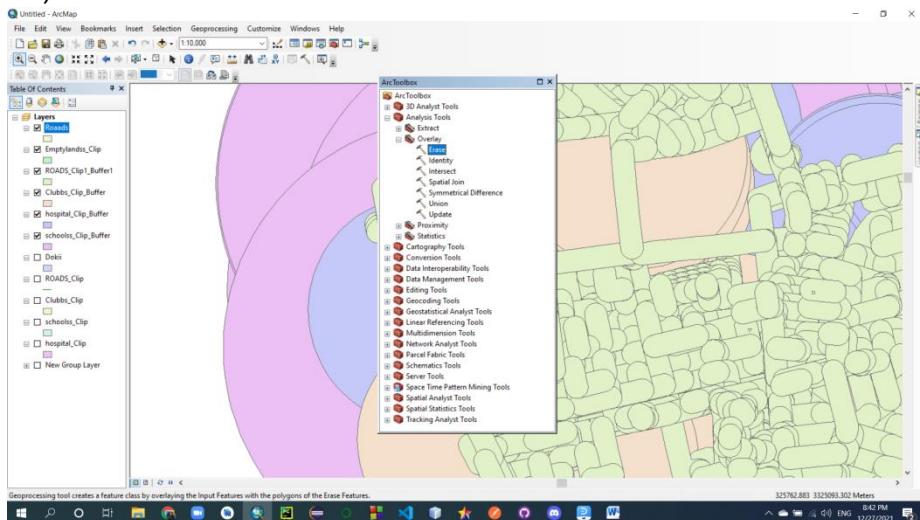
### 13) Create schools buffer (بعد 1000)

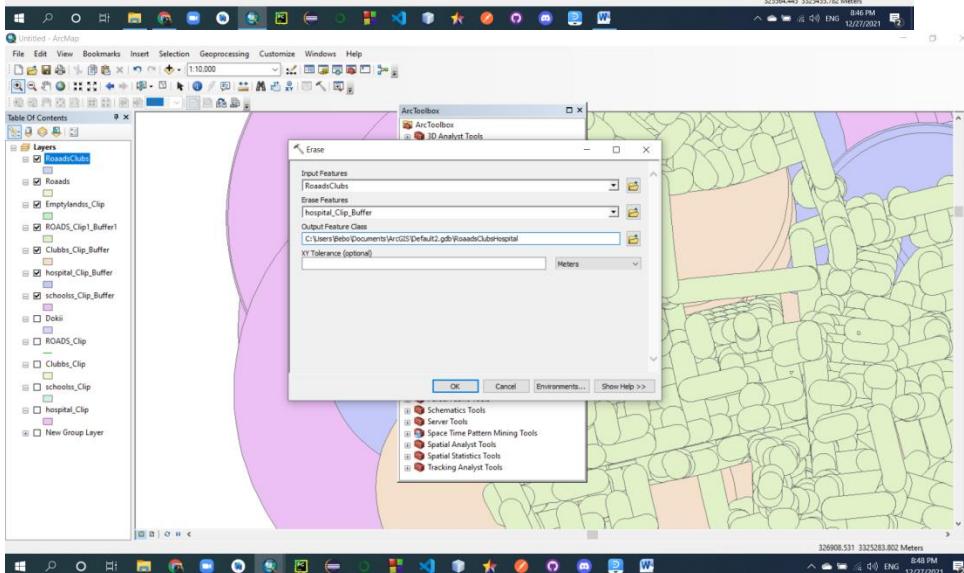
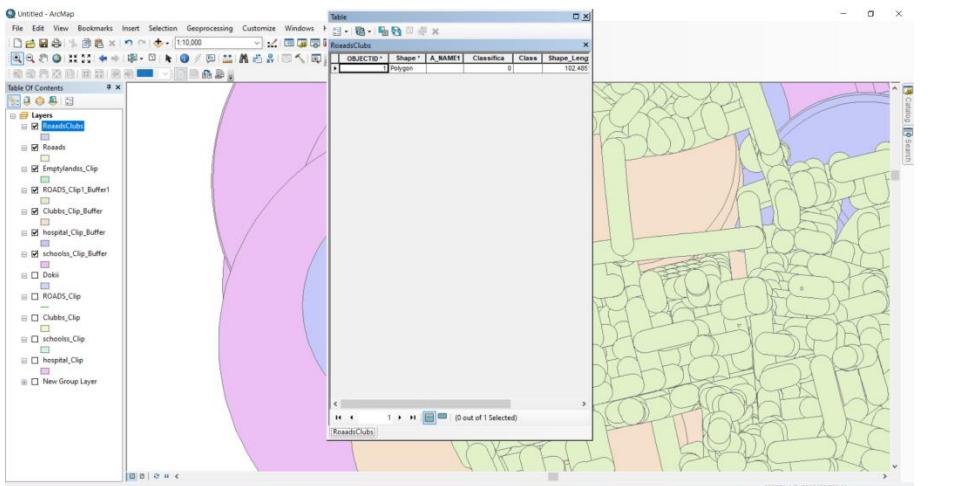


### 14) Create Roads clip(empty land clip& roads clip buffer )

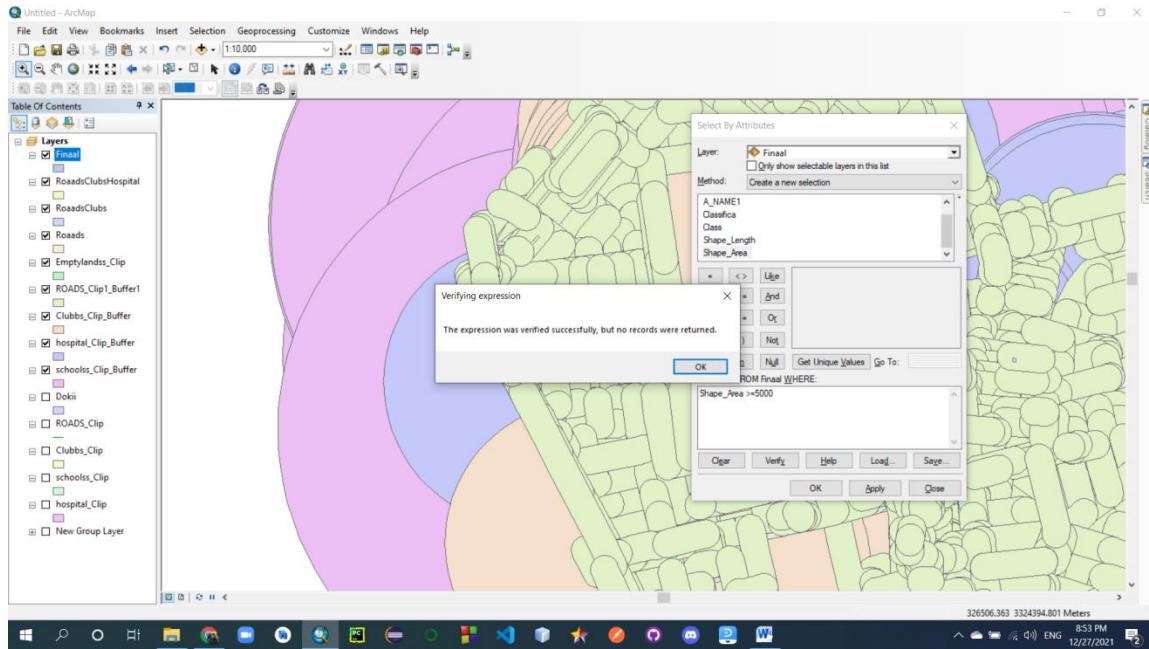


### 15) Erase



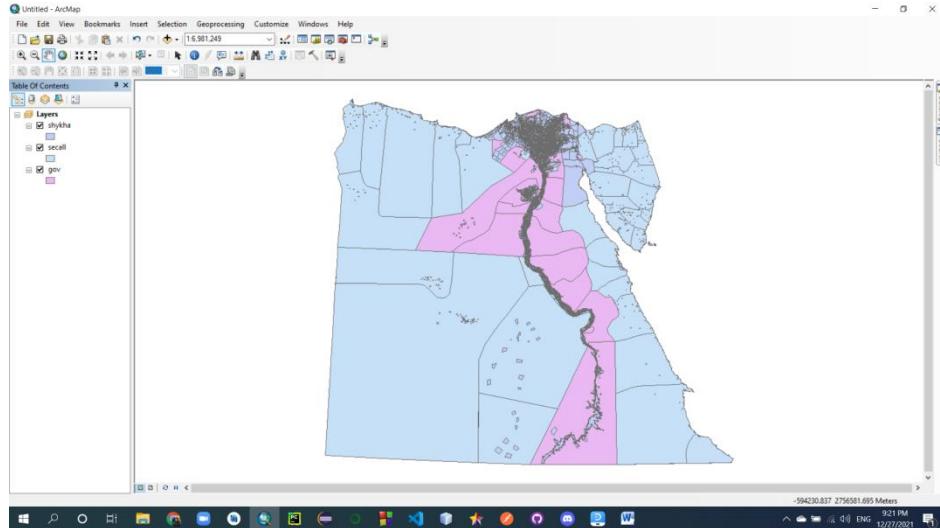


## Final Result (there is no area with this characteristics)

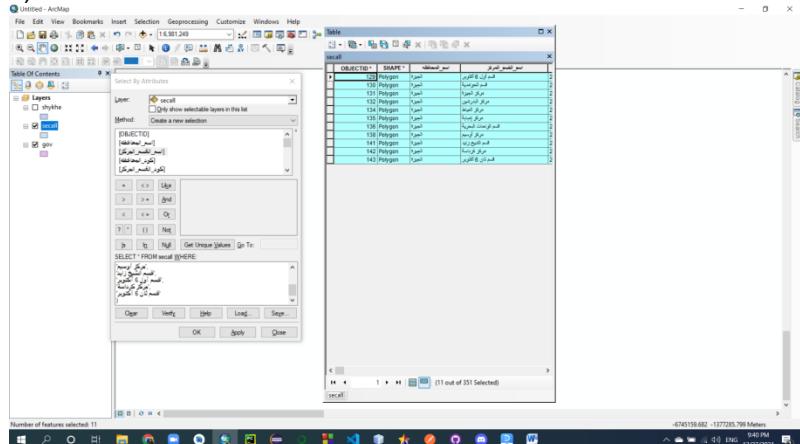


# Lab Exercise #3

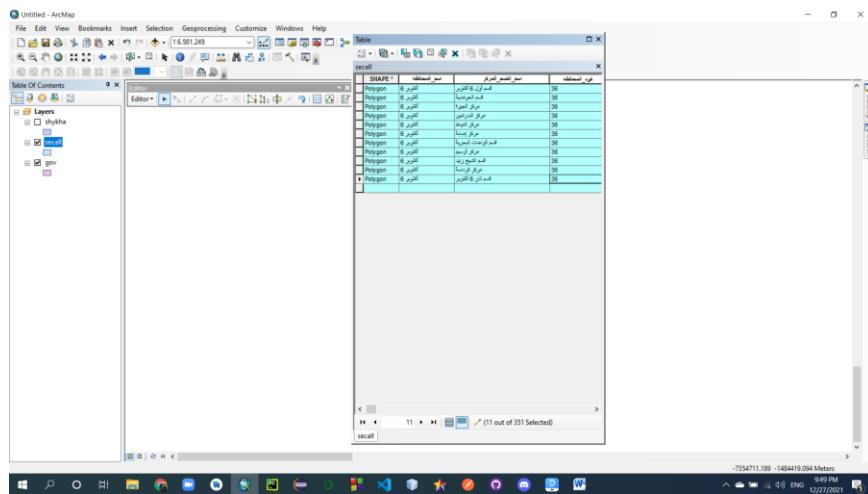
## 1) Add data



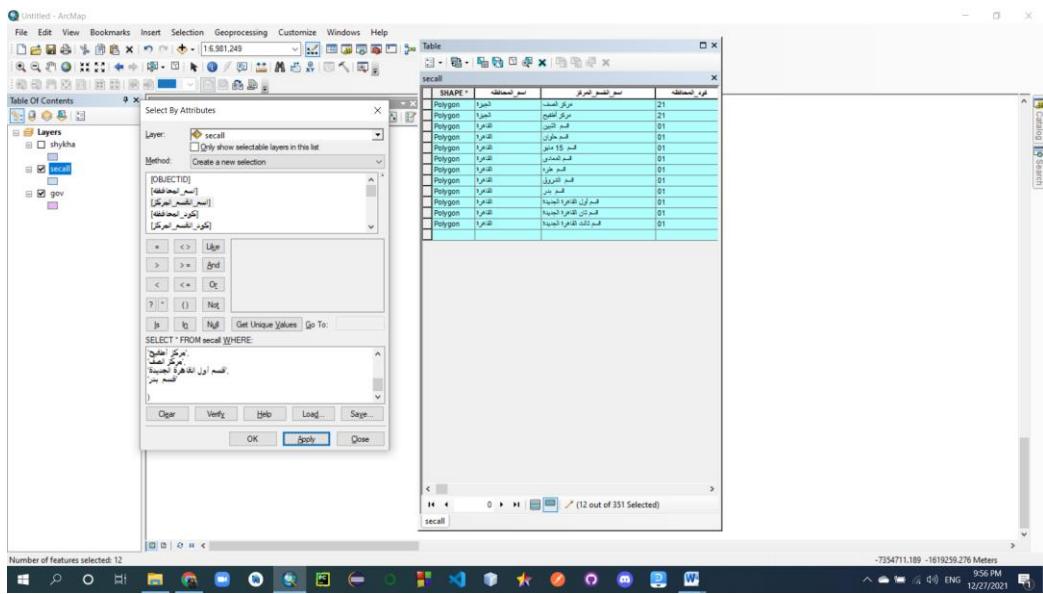
## 2) select from 6 october



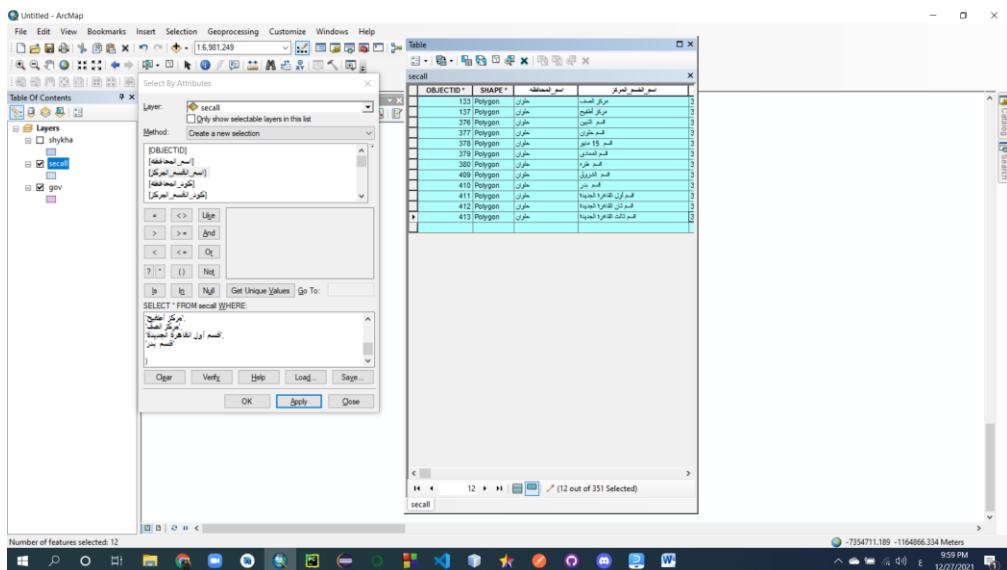
## 2) Editing



3) select helwan



#### 4) editing



## 5) Add layer for Helwan And 6 October

The screenshot shows the ArcMap interface with the 'Untitled - ArcMap' window open. In the 'Table Of Contents' pane, the 'Layers' section is expanded, showing 'secall' is selected. The 'Select By Attributes' dialog is open, set to 'Method: Create a new selection'. The query builder shows the condition: 'اسم\_المحافظة LIKE %هليون%'.

**Table View:**

النوع	نوع التصنيف	نوع المحافظة	النوع
36	القاهرة	القاهرة	2107
36	القاهرة	القاهرة	2108
36	القاهرة	القاهرة	2109
36	القاهرة	القاهرة	2110
36	القاهرة	القاهرة	2112
36	القاهرة	القاهرة	2113
36	القاهرة	القاهرة	2114
36	القاهرة	القاهرة	2116
36	القاهرة	القاهرة	2119
36	القاهرة	القاهرة	2120
36	القاهرة	القاهرة	2121

The screenshot shows the ArcMap interface with the 'Untitled - ArcMap' window open. In the 'Table Of Contents' pane, the 'Layers' section is expanded, showing 'Helwan' is selected. The 'Select By Attributes' dialog is open, set to 'Method: Create a new selection'. The query builder shows the condition: 'اسم\_المحافظة LIKE %هليون%'.

**Table View:**

النوع	نوع التصنيف	نوع المحافظة	النوع
37	القاهرة	القاهرة	2111
37	القاهرة	القاهرة	2115
37	القاهرة	القاهرة	0101
37	القاهرة	القاهرة	0102
37	القاهرة	القاهرة	0103
37	القاهرة	القاهرة	0114
37	القاهرة	القاهرة	0105
37	القاهرة	القاهرة	0140
37	القاهرة	القاهرة	0141
37	القاهرة	القاهرة	0137
37	القاهرة	القاهرة	0138
37	القاهرة	القاهرة	0139

## 6) Select Attribute in october and Helwan

Screenshot of ArcMap showing the "OctoberDissolved" table.

**Table View:**

OBJECTID	SHAPE	نوع المخططة	غير المخططة	نوع	عدد الأسر	نفوس	متوسط حجم الأسرة	نسبة النوع	النوع من المجموع	نسبة النوع	النوع من المجموع
1	Polygon	أهوار	37	601856	1304727	1202300	4	111	397629	10	10

**Table Of Contents:**

- Layers
  - testing
  - OctoberDissolved
  - HelwanDissolved
  - Helwan
  - 6 october
  - shykha
  - secall
  - gov

Screenshot of ArcMap showing the "HelwanDissolved" table.

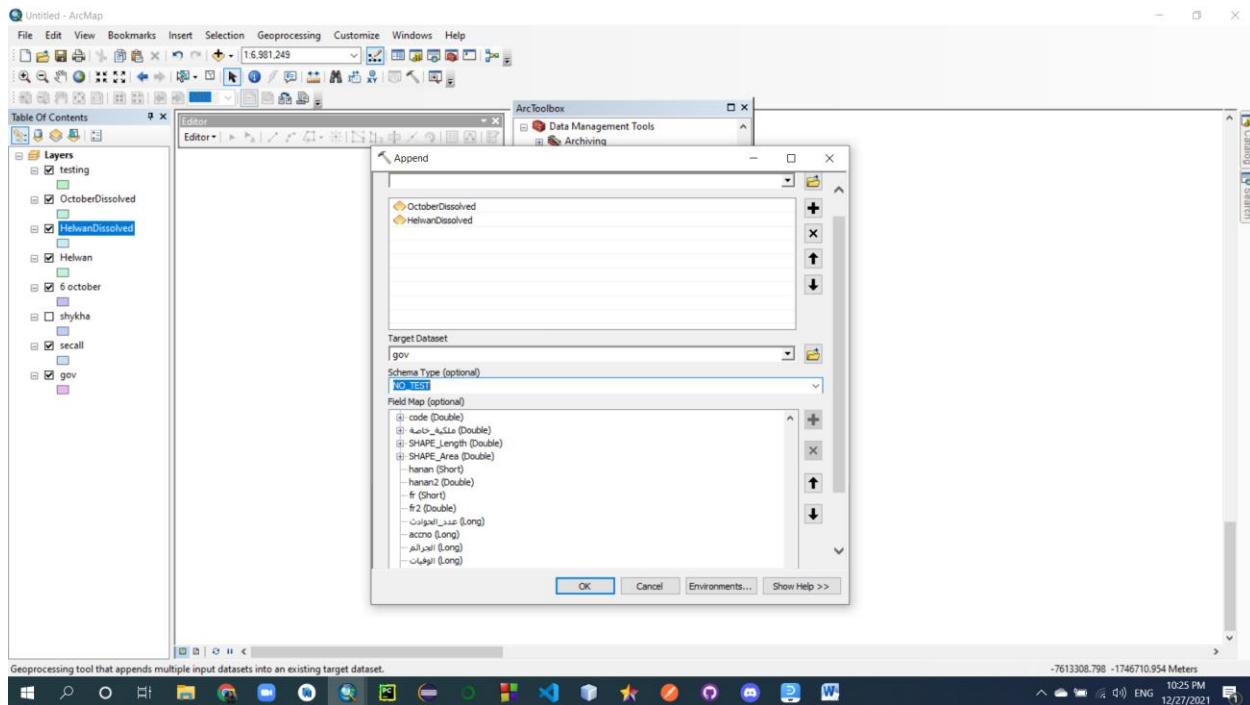
**Table View:**

OBJECTID	SHAPE	نوع المخططة	غير المخططة	نوع	عدد الأسر	نفوس	متوسط حجم الأسرة	نسبة النوع	النوع من المجموع	نسبة النوع	النوع من المجموع
1	Polygon	خران	36	407351	864083	816802	3	106	245715	10	10

**Table Of Contents:**

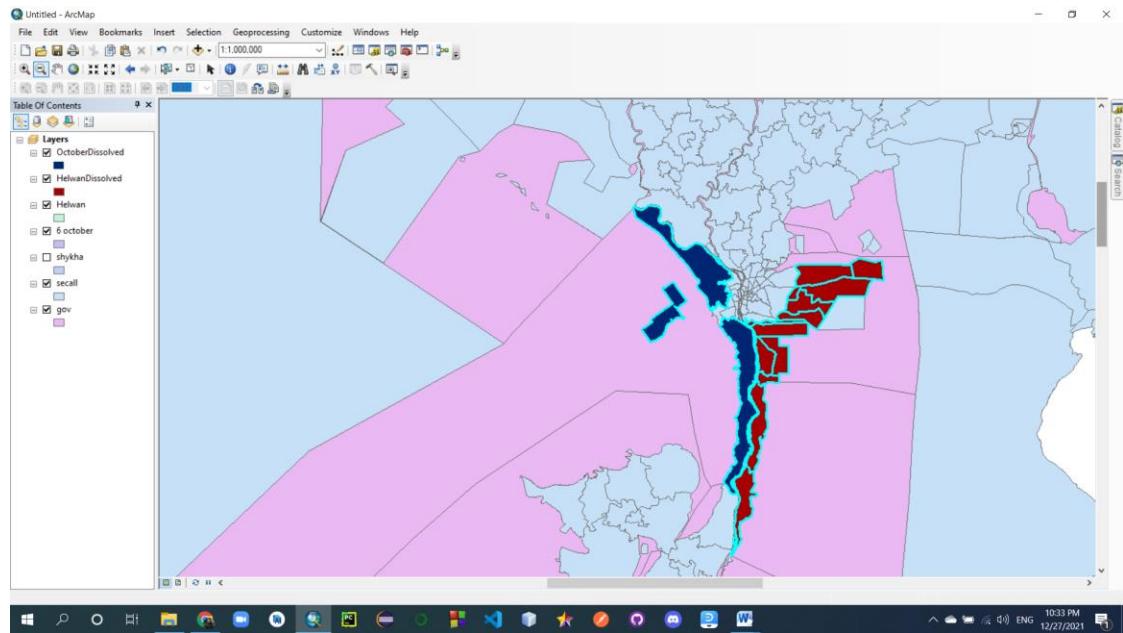
- Layers
  - testing
  - OctoberDissolved
  - HelwanDissolved
  - Helwan
  - 6 october
  - shykha
  - secall
  - gov

6) Add helwan and October to gov

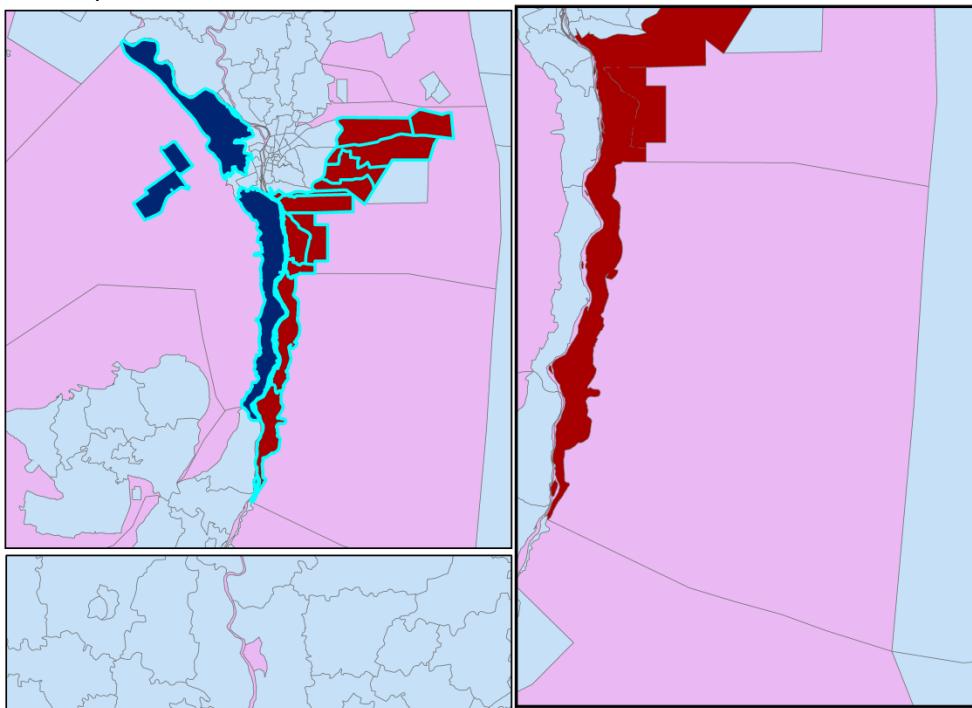


7) Gov table added 6 october and helwan

7) Helwan and 6 october on the map



8) Last map



Rehab Mohamed

