

## **Team Members**

- 1 ـ مروان أحمد محمد فوزي (IS)
  - 20191700616-
  - 2-سمر سمير صبحي حنا (IS)
    - 20191700294-
- 3-سمعان كمال بطرس خلة (IS)
  - 20191700297-
- 4-عبير أحمد شلقامي عبدالمجيد (IS)
  - 20191700385-
  - 5-عادل أمجد سلامة رزق (IS)
    - 20191700325-
  - 6-كريم محمد عبدالحميد محمد (IS)
    - 20191700456-

## Requirements:

- 1) List all data we're working with and show them on ArcMap
- 2) Create a shapefile for countries that have "military" airports + Print them in Pycharm
- 3) Create a shapefile for roads in "Asia" continent + Print their number in Pycharm
- 4) Create a shapefile for ports in countries (Italy, Spain, France)
- 5) Create a shapefile for all <u>Arabic cities</u> using 2 methods
  - Multiple Selections
  - If Condition
- 6) Using Search Cursor print the name, location & wikipedia for all airports which are major
- 7) Using Search Cursor create shapefiles for roads in countries based on (FID & Sovereignty) condition that region is "Africa" & population > 25 million

  Let files names be in the format of
  - $"Roads\_in\_CountryName\_CountryIncome"$
- 8) Create a tool implementing requirement no. 7 (Above requirement) adding Log Messages
- 9) Create a tool to update empty ports website to any other website, adding Log Messages
- 10) Create a tool to update population of countries that their population year is < 2019, adding Log Messages + Print which countries have been updated
- 11) Print name & type of cities fields
- 12) Using Update Cursor for multiple fields, update empty or "zero" fields that are not of string datatype in cities
- 13) Print full path for a bunch of images
- 14) Print exif Tags for these images
- 15) Print GPS Tags/Info for each image indicating which is geotagged & which is not
- 16) Print latitude & longitude for each geotagged image