General Instructions

- The code must be written in C# language.
- The Framework has to be .NET 4.0
- The code should be well organized, readable with Comments
- You should write the task as a function which get the input we give you and return the output we asked for.
- If you use assistant function/class/libraries, you should mention it and add it to the main function.
- If you want suggestions for solving the problem, we would be glad to give you ideas for solution. Be free to ask us questions.
- I think that this function is based on the previous function, you should use anything you think will help you.
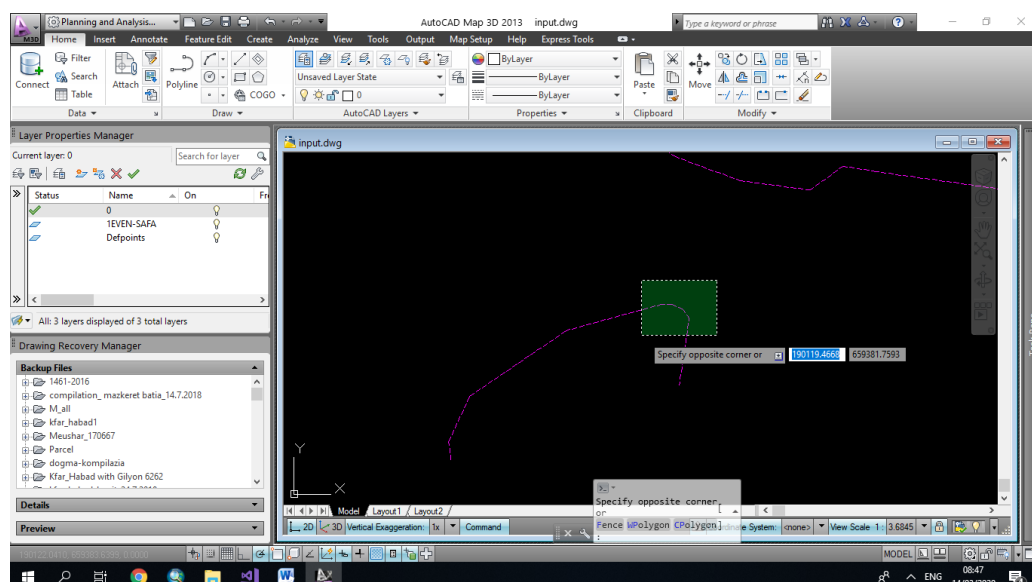
Task:

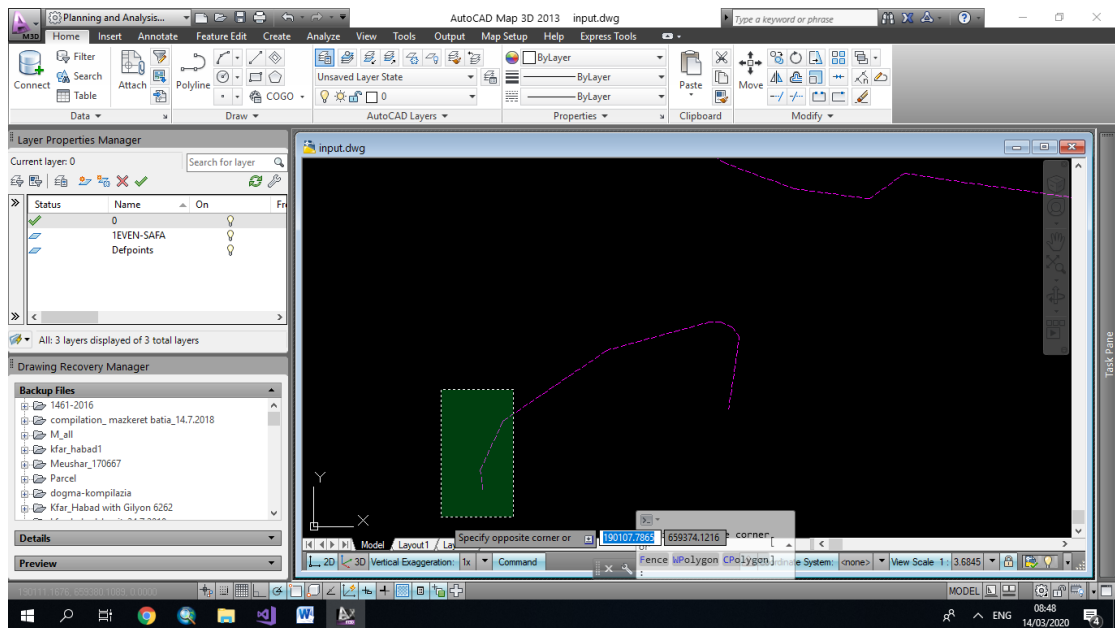The goal of this function is to create automatically arc between chosen vertices

- The user will select a polyline and remark by rectangle selection all the vertices he wants to take part in the function.
- The function has to recognize the right sequence between the vertices what vertex is the first in the sequence and what is the last
- If the user selects two separate groups of vertices, The function should recognize that there are two separate groups and handle it sparatly

  Example:

  First group of vertices:

Second group of vertices:

- For each group of vertices , the function has to create arc between each vertex with the fallowing manner :
  - Calculate the radius of the circle which pass through the current vertex , the fallowing vertex and the one after it .
  - Create the arc between the current vertex and the next vertex with the same radius calculated above
  - If the vertex is located two indices before the last index in the group, the function will create arc between the current vertex and the next vertex and another arc between the next vertex and the one after it with the same radius calculated above

- There are input and output dwg files

Function name : CreateArcBetweenSelectedVetices

public void CreateArcBetweenSelectedVetices (Polyline pl)

Input: pl – A polyline selected by the user

Output:

- *The function will do the actions mentioned above*