

Purpose: Understand the ML.NET pipeline and identify the type of problems that can be solved with ML.NET

Question 1

[6 marks]

- 1.1 In your own words, list two problems that regression algorithms can be used to solve and why, based on their characteristics. [1 mark]
- 1.2 In your own words, List two problems that belong to classification problem and why, based on their characteristics. [1 mark]
- 1.3 In your own words, List two problems that can be solved by using clustering algorithm(s) and why, based on their characteristics. [1 mark]
- 1.4 In your own words, what is anomaly detection? [1 mark]
- 1.5 Use an app example to illustrate what the ML.NET pipeline is [2 marks]

Question 2

[5 marks]

Implement C# application to predict the medical cost by using ML.NET based on the dataset insurance.csv

Question 3

[5 marks]

Implement C# application to predict student's knowledge level by using ML.NET based on the dataset Student.csv and readme.txt

[Hint] you can do it by mimicking the tutorial at <https://docs.microsoft.com/en-us/dotnet/machine-learning/tutorials/iris-clustering>