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Assignment 11 - Fuzzy Logic

- **Fuzzy_Addition.ipynb -** Implementation of Fuzzy Addition

- **Fuzzy_Substraction.ipynb -** Implementation of Fuzzy Substraction

- **Fuzzy_Multiplication.ipynb -** Implementation of Fuzzy Multiplication

- **Fuzzy_Division.ipynb -** Implementation of Fuzzy Division

- **COVID_Mamdani.fis -** Implementation of COVID inference system based on Fuzzy Logic using Mamdani method, based on seven input features: Fever, Headache, General Pain, Cold, Cough, Sore Throat and Shortness of Breath. The following has been created in Matlab using the Matlab Fuzzy Logic Toolbox. The rule for this file has been there in the Mamdani.png file.

- **COVID_Sugeno.fis -** Implementation of COVID inference system based on Fuzzy Logic using Sugeno method, based on seven input features: Fever, Headache, General Pain, Cold,

Cough, Sore Throat and Shortness of Breath. The following has been created in Matlab using the Matlab Fuzzy Logic Toolbox. The rule for this file has been there in the Sugeno.png file.

- **Mamdani.png** - Graphic representation of rules for COVID_Mamdani.fis as generated by Matlab.

- **Sugeno.png** - Graphic representation of rules for COVID_Sugeno.fis as generated by Matlab.