Graduate Program in Software

SEIS 763: Machine Learning

Assignment #1 (100 points)

Due Date: September 13th

Write a MatLab or Python program to answer the following questions **in sequence**:

1. Read in the CSV file "ML_HW_Data_FisherIris.csv" into a matrix named as "***Iris***". Please do NOT output the whole matrix in our answer.
2. **Display** **total number of rows** and **total number of columns** of the matrix "***Iris***".
3. **Display** all the **row numbers** (i.e. record numbers) that have the 5th column less than 0.
4. Remove the rows with the 5th column less than 0 from the "***Iris***" matrix. Please do **NOT** output the whole resulting matrix in our answer.
5. **Display** **total number of rows** and **total number of columns** of the "***Iris***" matrix again.
6. Copy the first 4 columns in the new "***Iris***" matrix into a new matrix "***X***". Please do **NOT** output the whole resulting matrix in our answer.
7. Copy the 5th columns in the new "***Iris***" matrix into a new variable (or matrix) "***Y***". Please do **NOT** output the whole resulting matrix in our answer.
8. **Display** the **maximum value** and the **minimum value** of **EACH column** in "***X***".
9. **Display** **total number of elements** (i.e. items) in the third column of the matrix "***X***" that are greater than 36.

Submission Guideline:

1. Please include the answers to the above questions that required your program to "**display**" in a WORD document. Please also put **your name** on the top of your WORD document.
2. Please print your program (matlab or python) as **PDF** and include the **PDF** in your submission.
3. Please also include your program in the formats like .m/.mlx/.py/.inpyb in your submission.
4. Prepare EVERYTHING mentioned in the guideline and submit them on **Canvas** no later than the due date. Please do **NOT** zip your files.
5. Please carefully follow the submission guideline. Otherwise, the instructor may not be able to grade your assignment.