﻿Write a python code to plot a line graph using the data present in the file

“pip-latency-comparison.txt”.

The final figure should look as shown in the png file. Should match line style, line color etc.

See below for some details:

Plot the line graphs for the columns PIP, Flush, PSFQ, Fetch only in the mentioned order. (Ignore that the numbers are starting from 3 below instead of 1)

3. For the line graph corresponding to PIP use:

1. Color “red”

2. Marker “x”

3. Linestyle “solid”

4. For the line graph corresponding to Flush use:

1. Color “blue”

2. Marker “+”

3. Linestyle “dashed”

5. For the line graph corresponding to PSFQ use:

1. Color “black”

2. Marker circle

3. Linestyle “dashdot”

6. For the line graph corresponding to Fetch use:

1. Color “green”

2. Marker upper triangle

3. Linestyle “dotted”

7. Some common instructions for all three line graphs:

1. Make sure that the markersize is set to 9

2. Set the markeredgewidth to 2

3. Make sure that the line width is set to 2

4. Labels should be with the exact name as the corresponding column name.

8. The legend should be displayed using the “best” location

9. Labels for x,y should be: “Number of Hops” and “Latency (ms)”

10. Display the grid.

hops,PIP,Flush,PSFQ,Fetch

1,7.245,37.62,46.46,94

2,7.245,47.85,92.93,

3,7.130,61.68,142.49,

4,7.105,65.54,185.86,

5,7.105,72.32,209.55,

6,7.086,80.67,232.33,409

7,7.086,87.39,,

8,7.086,,,

9,7.032,,,

import numpy as np

import matplotlib.pyplot as plt

input = np.genfromtxt('input.txt',delimiter=',' )

output = input.T

plt.plot(output[0][1:],output[1][1:], color='red', ls='solid', marker='x', ms=9, mew=2, lw=2)

plt.plot( )

plt.plot(output[0][1:8],output[2][1:8], color='blue', ls='dashed', marker='+', ms=9, mew=2, lw=2)

plt.plot()

plt.plot(output[0][1:7],output[3][1:7], color='black', ls='dashdot', marker='o', ms=9, mew=2, lw=2)

plt.plot()

plt.plot([1,6],[94,409], color='green', ls='dotted', marker='^', ms=9, mew=2, lw=2)

plt.plot()

plt.xlabel("Number of Hops")

plt.ylabel("Latency(ms)")

plt.grid()

plt.legend(["PIP","Flush","PSFQ","Fetch"], loc='best')

plt.show()