# -\*- coding: utf-8 -\*-

"""Untitled0.ipynb

Automatically generated by Colaboratory.

Original file is located at

https://colab.research.google.com/drive/1v-A4Oq5-91frTss-H1l5gG1y2TQqy\_B9

"""

import matplotlib.pyplot as plt

import numpy as np

# 读取HL.txt

h\_l = np.loadtxt('hL.txt')

# 读取HR.txt

h\_r = np.loadtxt('hR.txt')

# 生成横坐标

n = np.arange(len(h\_l))

# 绘制HL冲激响应

plt.stem(n, h\_l)

plt.xlabel('n')

plt.ylabel('h\_l[n]')

plt.title('HL Filter Impulse Response')

# 绘制HR冲激响应

plt.figure()

plt.stem(n, h\_r)

plt.xlabel('n')

plt.ylabel('h\_r[n]')

plt.title('HR Filter Impulse Response')

plt.tight\_layout()

plt.show()

import matplotlib.pyplot as plt

import numpy as np

# 读取HL.txt

y\_l = np.loadtxt('YL.txt')

# 读取HR.txt

y\_r = np.loadtxt('YR.txt')

# 生成横坐标

n = np.arange(len(y\_l))

plt.plot(n,y\_l)

plt.title("YL")

plt.xlabel("time")

plt.ylabel("size")

plt.show()

plt.plot(n,y\_r)

plt.title("YR")

plt.xlabel("time")

plt.ylabel("size")

plt.show()