Assignment 0, COMP 576

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1 Task 1

```
(groq) YuanyuanZhu@Yuanyuan-MBP hw2problem4 % conda info
/opt/anaconda3/lib/python3.12/site-packages/conda/base/context.py:198: FutureWarning: Addi
To remove this warning, please choose a default channel explicitly with conda's regular co
  conda config --add channels defaults
For more information see https://docs.conda.io/projects/conda/en/stable/user-guide/configu
 deprecated.topic(
     \verb"active" environment : \verb"groq"
    active env location : /opt/anaconda3/envs/groq
            shell level : 2
       user config file : /Users/YuanyuanZhu/.condarc
populated config files : /Users/YuanyuanZhu/.condarc
          conda version: 25.3.0
    conda-build version: 24.5.1
```

python version: 3.12.2.final.0

solver : classic

virtual packages : __archspec=1=m1

__conda=25.3.0=0 __osx=12.5.1=0

__unix=0=0

base environment : /opt/anaconda3 (writable)
conda av data dir : /opt/anaconda3/etc/conda

conda av metadata url : None

channel URLs: https://repo.anaconda.com/pkgs/main/osx-arm64

https://repo.anaconda.com/pkgs/main/noarch https://repo.anaconda.com/pkgs/r/osx-arm64 https://repo.anaconda.com/pkgs/r/noarch

package cache : /opt/anaconda3/pkgs

/Users/YuanyuanZhu/.conda/pkgs

envs directories : /opt/anaconda3/envs

/Users/YuanyuanZhu/.conda/envs

platform : osx-arm64

user-agent : conda/25.3.0 requests/2.32.3 CPython/3.12.2 Darwin/21.6.0 OSX/12

UID:GID : 501:20
netrc file : None
offline mode : False

2 Task 2

N/A

3 Task 3

```
import matplotlib.pyplot as plt
plt.plot([1,2,3,4], [1,2,7,14], 'ro')
plt.axis([0, 6, 0, 20])
plt.show()
```

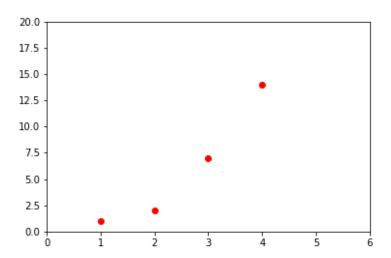


Figure 3.1: Figure 3.1: exported figure of matplotlib

4 Task 4

```
import numpy as np
import matplotlib.pyplot as plt
ax = plt.subplot(111)
t = np.arange(0.0, 10.0, 0.01)
s = np.cos(2*np.pi*t)+1
line, = plt.plot(t, s, lw=2)
plt.ylim(-1,3)
plt.savefig('foo2.png')
plt.show()
```

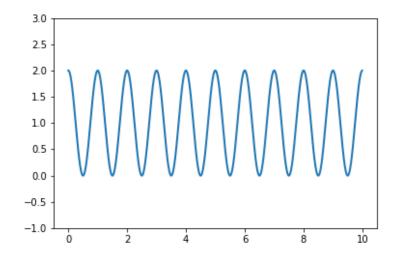


Figure 4.1: Figure 4.1: exported figure of matplotlib

5 Task 5

Github Account: YuanyuanZ0908

6 Task 6

https://github.com/YuanyuanZ0908/COMP576