

ECE 313 (Section G)

Project 1 Task 0

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Code

```
1 import scipy.io as sio
2 import matplotlib.pyplot as plt
3
4 # load MAT file
5 matFile = sio.loadmat('patient_data.mat')
6
7 # create subplots and format
8 figure, axis = plt.subplots(3, figsize=(18, 9))
9 figure.tight_layout(pad=3.0)
10
11 # plot data on each subplot
12 axis[0].plot(matFile['data'][0])
13 axis[0].set_title('Heart Rate')
14 axis[0].set_ylabel='BPM')
15 axis[1].plot(matFile['data'][1])
16 axis[1].set_title('Pulse Rate')
17 axis[1].set_ylabel='BPM')
18 axis[2].plot(matFile['data'][2])
19 axis[2].set_title('Respiration Rate')
20 axis[2].set_ylabel='Breaths/Min')
21
22 plt.show()
```

Output

