

EE16A HW

1)

- a) VAIBHAV BHAT
- b) I'm from Irvine, CA. I enjoy running, dancing, and reading.
- c) The diverse, fun community.
- d) Electrical engineering
- e) Electrical engineering & Computer Science ☺
- f) Time machine. To create this we'd need a way to mass-create matter with negative energy density.
- g) I've taken Pre-calc and Calculus BC, I've also taken algebraic Physics 1B 2.
- h) Mac
 - i) The simplistic and streamlined usability of iOS and its desktop counterparts.

2) a) Yes, but space is prioritized to registered students.

b) 2 hw drops

c) ipynb file, pdf file of solutions and code printout

d) Thursday at 23:59:00

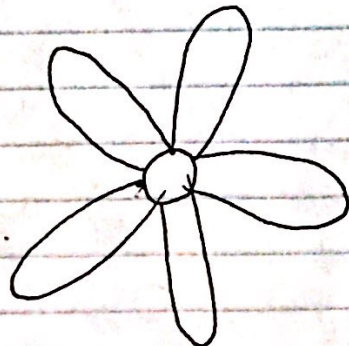
e) Zero

f) 3 unexcused labs

g) Piazza

3) a) It's a flower!

b) "The sum is 6328"



EE16A: Homework 0

Getting to know iPython

Part (a)

Execute the following mystery drawing, then draw the same object yourself (by hand):

```
In [1]: %matplotlib inline
import numpy as np
import matplotlib.pyplot as plt

theta = np.linspace(0, 2*np.pi, 1000)
r = 0.7*np.cos(5*theta) + 1.0

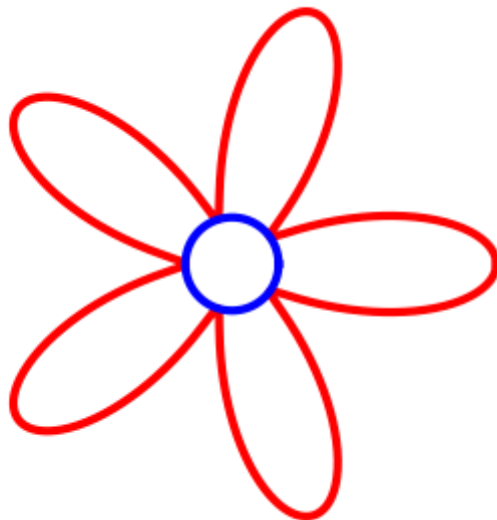
ax = plt.subplot(111, polar=True)
ax.plot(theta, r, color='r', linewidth=3)
ax.plot(theta, 0.3*np.ones(len(theta)), color='b', linewidth=3)
ax.grid(False)
ax.set_rmax(2)
ax.xaxis.set_visible(False)
ax.yaxis.set_visible(False)
ax.spines['polar'].set_visible(False)
```

```
/Users/vaibhavbhat/anaconda/lib/python3.5/site-packages/matplotlib/font
_manager.py:273: UserWarning: Matplotlib is building the font cache usi
ng fc-list. This may take a moment.
```

```
warnings.warn('Matplotlib is building the font cache using fc-list. T
his may take a moment.')
```

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```

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his may take a moment.')
```



Part (b)

The following code takes the sum of integers 0...10

Modify it to take the sum of integers 0...112

```
In [2]: total = 0
        i = 0
        while (i <= 112):
            total += i
            i += 1

        print("The sum is " + str(total))
```

The sum is 6328

```
In [ ]:
```