

**Computer Science Department**  
**CS632V – Introduction to Big Data Analytics**  
**Spring 2017**

**Assignment #1**

- a) Write up a Python function that will convert Celsius degrees to Fahrenheit degrees and vice versa!

- b) Write up a Python script that will copy the contents of one file into another

```
from sys import argv
from os.path import exists

script, from_file, to_file = argv

print "Copying from %s to %s" % (from_file, to_file)

# we could do these two on one line too, how?
in_file = open(from_file)
indata = in_file.read()

print "The input file is %d bytes long" % len(indata)

print "Does the output file exist? %r" % exists(to_file)
print "Ready, hit RETURN to continue, CTRL- C to abort."
raw_input()

out_file = open(to_file, 'w')
out_file.write(indata)

print "Alright, all done."

out_file.close()
in_file.close()
```

- c) Print an alphabetically sorted list of all functions in the re module, which contain the word find.

```
import re
```

```
# Your code goes here
```

- d) Write the Probability Density Function of Normal Distribution in a Jupyter Notebook by utilizing Markdown & LaTeX code

$$P(x) = \frac{1}{\sigma \sqrt{2\pi}} e^{-(x-\mu)^2 / (2\sigma^2)}$$