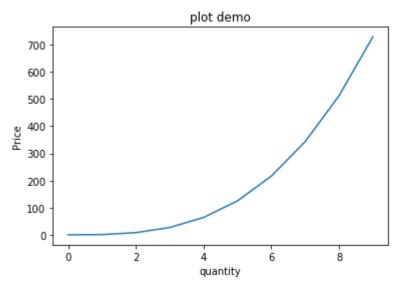
2/6/2018 151-15-5131

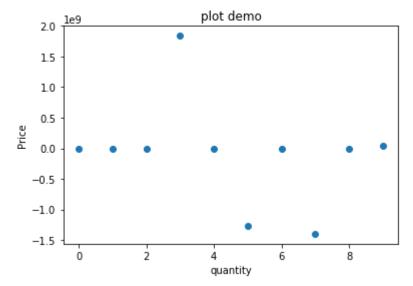
```
In [1]: list1 = ['physich', 'chemistry', 100, 134]
In [2]: list1
Out[2]: ['physich', 'chemistry', 100, 134]
 In [3]: import numpy as np
         import pandas as pd
In [4]: a = np.array([12, 15, 8])
In [5]: a
Out[5]: array([12, 15, 8])
In [6]: print(a)
         [12 15 8]
In [7]: b = np.arange(10)
         print(b)
         [0 1 2 3 4 5 6 7 8 9]
In [8]: b = np.arange(10,dtype = float)
         print(b)
         [0. 1. 2. 3. 4. 5. 6. 7. 8. 9.]
In [9]: np.arange(5,12,2)
Out[9]: array([ 5, 7, 9, 11])
In [10]: np.zeros(6)
Out[10]: array([ 0., 0., 0., 0., 0., 0.])
In [11]: np.ones(5)
Out[11]: array([ 1., 1., 1., 1., 1.])
In [12]: b[:3]
Out[12]: array([ 0., 1., 2.])
In [13]: import matplotlib.pyplot as plt
```

2/6/2018 151-15-5131

```
In [14]: x = np.arange(10)
y = x**3
plt.title("plot demo")
plt.xlabel("quantity")
plt.ylabel("Price")
plt.plot(x,y)
plt.show()
```



```
In [15]: x = np.arange(10)
y = x**101
plt.title("plot demo")
plt.xlabel("quantity")
plt.ylabel("Price")
plt.scatter(x,y)
plt.show()
```



2/6/2018 151-15-5131

```
In [16]: x = np.arange(10)
y = x**666
plt.title("plot demo")
plt.xlabel("quantity")
plt.ylabel("Price")
plt.bar(x,y, color = 'pink')
plt.show()
```

