

```

1 # Simple class
2 class tickerClient(object):
3     table = dict()
4
5     def __init__(self):
6         pass
7
8     def peek(self, ticker):
9         return self.table[ticker][-1]
10
11    def insert(self, ticker, price):
12        self.table.setdefault(ticker, []).append(price)
13 # Test tickerClient
14 c = tickerClient()
15 c.insert('ibm', 34.4)
16 c.insert('ibm', 37)
17 print( c.table )
18 print( c.peek('ibm') )
19
20
21
22
23 def atoi(a):
24     tot = 0
25     for d in a:
26         x = ord(d)-ord('0')
27         tot = tot*10 + x
28     return tot
29 # Test atoi
30 a = '341'
31 print(atoi(a))
32
33
34
35
36 def itoa(n):
37     from collections import deque
38     q = deque()
39     while n!=0:
40         # Extract right most digit, offset by ascii '0', converts to string
41         q.appendleft( chr( ord('0')+n%10 ) )
42
43         # Right shift base 10
44         n = n//10
45     return ''.join(q)
46 # Test itoa
47 n = 341
48 print(itoa(n))

```