Example 1

January 25, 2017

```
In [1]: import numpy as np
        q = 0.1 #stepsize
        x = np.array([0.012, 1.234, 2.456, 3.789])
        print x

[ 0.012  1.234  2.456  3.789]
```

Mid-Tread quantizer (Encoder):

```
In [2]: index = np.round(x/q)
        print index

[  0.  12.  25.  38.]
```

De-quantization (Decoder):

```
In [3]: reconstr = index * q
        print reconstr

[ 0.   1.2  2.5  3.8]
```