

How to transfer a Nx1 array to 1xN array

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1xN -> Nx1

Key

`Array1xN.reshape(N, 1)`

```
signals_Nx1 = signals
print(signals_Nx1)

signals_1xN = signals_Nx1.reshape(-1)
print(signals_1xN.shape)
print(signals_1xN)

signals_new_Nx1 = signals_1xN.reshape(20000,1)
print(signals_new_Nx1)
```

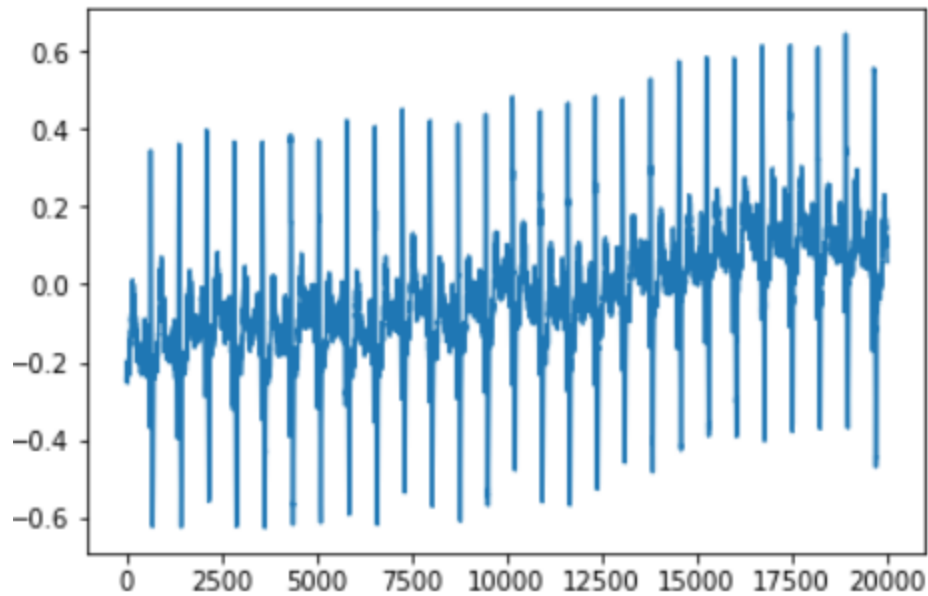
Result

```
[[-0.2445]
 [-0.2425]
 [-0.2415]
 ...,
 [ 0.078 ]
 [ 0.068 ]
 [ 0.058 ]]
(20000,)
[-0.2445 -0.2425 -0.2415 ..., 0.078 0.068 0.058]
```

```
[[-0.2445]  
 [-0.2425]  
 [-0.2415]  
 ...,  
 [ 0.078 ]  
 [ 0.068 ]  
 [ 0.058 ]]
```

Example Code

```
import wfdb  
import matplotlib.pyplot as plt  
  
# Step 1: Read the record from ptbdb database  
signals, fields = wfdb.rdsamp('./s0010_re', channels=[0], sampfrom=0, sampto=20000)  
print(signals[0])  
numpy.savetxt("foo.csv", signals, delimiter=",") # save the ECG sequence to csv  
  
# Step 2: Show the ECG  
t = numpy.linspace(0, 20000, 20000)  
plt.plot(t, signals)  
#display(signals)  
#display(fields)  
plt.show()
```



```
signals_Nx1 = signals
print(signals_Nx1)

signals_1xN = signals_Nx1.reshape(-1)
print(signals_1xN.shape)
print(signals_1xN)

signals_new_Nx1 = signals_1xN.reshape(20000,1)
print(signals_new_Nx1)
```

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[[-0.2445]
 [-0.2425]
 [-0.2415]
 ...,
 [ 0.078 ]
 [ 0.068 ]
 [ 0.058 ]]
(20000,)
[-0.2445 -0.2425 -0.2415 ..., 0.078  0.068  0.058 ]
[[-0.2445]
 [-0.2425]
 [-0.2415]
 ...,
 [ 0.078 ]
 [ 0.068 ]
 [ 0.058 ]]
```

