

## Contents

```
(setq org-babel-python-command "~/Documents/Assignments/NLA/bin/python")
```

```
import numpy as np
from numpy.linalg import qr
```

```
A = np.array([[8,1,6], [3,5,7], [4,9,2]])
Q, R = qr(A)
```

```
print("Q: ", Q)
print("R: ", R)
```

```
Q.dot(R)
```

```
q = np.array([
    [0.8480, -0.5223, -0.0194],
    [0.3180, 0.3655, 0.1889],
    [0.4240, 0.7705, -0.1028]
])
```

```
r = np.array([
    [9.4340, 6.2540, 8.1620],
    [0, 8.2394, 0.9657],
    [0,0,21.4497]
])
```

```
q.dot(r)
```