

Numeriska metoder Python

Linjär algebra numpy

```
# -*- coding: utf-8 -*-
"""
Spyder Editor

This is a temporary script file.
"""

import numpy as np
x=np.array([[1,2,3,4]])
A=np.array([[1,2],[3,4],[5,6],[7,8]])
b=np.array([[1,1]])

def test(x,A,b):
    C=np.matmul(x,A)+b
    return C

utdata=test(x,A,b)
```

$$x = [1, 2, 3, 4] \quad \mathbb{R}^{1 \times 4}$$

$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \end{bmatrix} \quad \mathbb{R}^{4 \times 2}$$

$$b = [1, 1] \quad \mathbb{R}^{1 \times 2}$$

$$C = Ax + b \quad \mathbb{R}^{1 \times 2}$$