

Exercise

- A. Reshape vector a to matrix A, where a=1:1:16
- B. Get a sub-matrix ans from A
- C. Exchange the 1st and 3rd rows of matrix A

```
A =
     1     5     9    13
     2     6    10    14
     3     7    11    15
     4     8    12    16

ans =
     3     7    11    15
     1     5     9    13
     2     6    10    14
```

- D. Use repmat to generate matrix Z
- E. Sum elements in each row of matrix Z
- F. Sum up elements in each column of matrix Z
- G. Solve a linear system by matlab instructions
- H. Generate image

```
>> Z
Z =
     3     7    11    15     3     7    11    15     3     7    11    15
     2     6    10    14     2     6    10    14     2     6    10    14
     1     5     9    13     1     5     9    13     1     5     9    13
     3     7    11    15     3     7    11    15     3     7    11    15
     2     6    10    14     2     6    10    14     2     6    10    14
     1     5     9    13     1     5     9    13     1     5     9    13
```



$$\begin{aligned} 2x + y - z &= 1 \\ -3x - 2y + 5z &= 0 \\ x + y + z &= 5 \end{aligned}$$

- I. Evaluate the volume of a parallelepiped defined by  $v_1=[1 \ 1/2 \ 1/3]$ ,  $v_2=[1/3 \ 1 \ 1/2]$  and  $v_3=[1/2 \ 1/3 \ 1]$

