>> a=[3 2 ; 2 4]

a =

3 2

2 4

%contar cuantos elementos son = 2

sum(a==2)

ans =

1 1

>> a==2

ans =

0 1

1 0

>> sum(a==2)

ans =

1 1

>> sum(sum(a==2))

ans =

2

>> %sumar los >2

a.\*(a>2)

ans =

3 0

0 4

>> sum(sum(a.\*(a>2)))

ans =

7

>> %mostrar solo los >2

>> a(a>2)

ans =

3

4

>> a(a>0)

ans =

3

2

2

4

>> x=a(a>2)

x =

3

4

>> %ubicar la posicion del elemento =3

>> a

a =

3 2

2 4

>> find(a==3)

ans =

1

>> find(a==4)

ans =

4

>> find(a==2)

ans =

2

3

>> [f c]=find(a==3)

f =

1

c =

1

>> [f c]=find(a==4)

f =

2

c =

2

>> [f c]=find(a==2)

f =

2

1

c =

1

2

>> x=[3 5 2 6 1];

>> max(x)

ans =

6

>> [m i]=max(x)

m =

6

i =

4

>> clc

>> %Problema de matriz de ventas (vendedor x producto) y vector de precios

>> v=[5 3 2;4 0 7;1 6 3;4 3 4]

v =

5 3 2

4 0 7

1 6 3

4 3 4

>> p=[ 2 3 4];

>> %cantidad total de productos vendidos

>> sum(sum(v))

ans =

42

>> %cantidad vendida por tipo de producto

>> sum(v)

ans =

14 12 16

>> %vector columna de ventas por cada vendedor

>> v'

ans =

5 4 1 4

3 0 6 3

2 7 3 4

>> sum(v')

ans =

10 11 10 11

>> sum(v')'

ans =

10

11

10

11

>> %monto total vendido en $

>> v\*p'

ans =

27

36

32

33

>> %es el monto de cada vendedor

>> sum(v\*p')

ans =

128

>> %es el monto de cada vendedor es:

>> sum(v\*p')

ans =

128

>> %es el monto de cada vendedor es:

>> v\*p'

ans =

27

36

32

33

>> %el monto total es:

>> sum(v\*p')

ans =

128

>> %monto total por producto

>> sum(v).\*p

ans =

28 36 64

>> %matriz de montos:

>> precio=[p;p;p;p]

precio =

2 3 4

2 3 4

2 3 4

2 3 4

>> v.\*precio

ans =

10 9 8

8 0 28

2 18 12

8 9 16

>> montos=v.\*precio

montos =

10 9 8

8 0 28

2 18 12

8 9 16

>> %que vendedor vendio la mayor cantidad de algun producto

>> [f c]=find(v==max(max(v)))

f =

2

c =

3

>> v==max(max(v))

ans =

0 0 0

0 0 1

0 0 0

0 0 0

>> vendedor=f

vendedor =

2

>> [vendedor c]=find(v==max(max(v)))

vendedor =

2

c =

3

>> %que producto se vendio en mayor cantidad

>> %Halle c el vector fila de cantidad vendida por tipo de producto

>> c=sum(v)

c =

14 12 16

>> %Halle k el producto se vendio en mayor cantidad

>> [m k]=max(sum(v))

m =

16

k =

3

>> [m k]=max(c)

m =

16

k =

3

>> %intercambiar el mayor elemento con el menor

>> imayor=find(v==max(max(v)))

imayor =

10

>> imenor=find(v==min(min(v)))

imenor =

6

>> aux=v(imayor);

>> v(imayor)=v(imenor);

>> v(imenor)=aux;

>> v

v =

5 3 2

4 7 0

1 6 3

4 3 4

>> clc

>> %intercambiar el mayor elemento con el menor

>> imayor=find(v==max(max(v)));

>> imenor=find(v==min(min(v)));

>> aux=v(imayor);

>> v(imayor)=v(imenor);

>> v(imenor)=aux

v =

5 3 2

4 0 7

1 6 3

4 3 4

>> %intercambiar el mayor elemento con el menor

>> imayor=find(v==max(max(v)));

>> mayor=max(max(v));

>> imenor=find(v==min(min(v)));

>> menor=min(min(v));

>> v(imayor)=menor;

>> v(imenor)=mayor

v =

5 3 2

4 7 0

1 6 3

4 3 4

>> v(6)=0

v =

5 3 2

4 0 0

1 6 3

4 3 4

>> v(10)=7

v =

5 3 2

4 0 7

1 6 3

4 3 4

>> v

v =

5 3 2

4 0 7

1 6 3

4 3 4

>> v(4,2)=5

v =

5 3 2

4 0 7

1 6 3

4 5 4

>> v(2,1:3)

ans =

4 0 7

>> v(2,:)

ans =

4 0 7

>> v(:,3)

ans =

2

7

3

4

>> v

v =

5 3 2

4 0 7

1 6 3

4 5 4

>> v(2:2:4,:)

ans =

4 0 7

4 5 4

>> v(2:2:end,:)

ans =

4 0 7

4 5 4

>> x

x =

3 5 2 6 1

>> length(x)

ans =

5

>> length(v)

ans =

4

>> [nf nc]=size(v)

nf =

4

nc =

3

>> v(2:2:end,1:2:end)

ans =

4 7

4 4

>> v

v =

5 3 2

4 0 7

1 6 3

4 5 4

>> v(5,5)

{Index exceeds matrix dimensions.

}

>> v(5,5)=3

v =

5 3 2 0 0

4 0 7 0 0

1 6 3 0 0

4 5 4 0 0

0 0 0 0 3

>> v(2,2)=[]

{A null assignment can have only one non-colon index.

}

>> %elimina la columna 4

>> v(:,4)=[]

v =

5 3 2 0

4 0 7 0

1 6 3 0

4 5 4 0

0 0 0 3

>> r=v

r =

5 3 2 0

4 0 7 0

1 6 3 0

4 5 4 0

0 0 0 3

>> %eliminar de v la 2da y 4ta fila

>> v(2:2:end,:)=[]

v =

5 3 2 0

1 6 3 0

0 0 0 3

>> v=r

v =

5 3 2 0

4 0 7 0

1 6 3 0

4 5 4 0

0 0 0 3

>> v(2,:)=[]; v(4,:)=[]

v =

5 3 2 0

1 6 3 0

4 5 4 0

%no estuvo bien

>> v=r

v =

5 3 2 0

4 0 7 0

1 6 3 0

4 5 4 0

0 0 0 3

>> v([2 4],:)=[]

v =

5 3 2 0

1 6 3 0

0 0 0 3

>> v=r

v =

5 3 2 0

4 0 7 0

1 6 3 0

4 5 4 0

0 0 0 3

x=[v(2,:);[1 2 3];v(3:-1:2,:)]

{Error using <a href="matlab:matlab.internal.language.introspective.errorDocCallback('vertcat')" style="font-weight:bold">vertcat</a>

Dimensions of matrices being concatenated are not consistent.

}

>> v

v =

5 3 2 0

4 0 7 0

1 6 3 0

4 5 4 0

0 0 0 3

>> x=[v [1 2 3 4 5]]

{Error using <a href="matlab:matlab.internal.language.introspective.errorDocCallback('horzcat')" style="font-weight:bold">horzcat</a>

Dimensions of matrices being concatenated are not consistent.

}

>> x=[v [1 2 3 4 5]']

x =

5 3 2 0 1

4 0 7 0 2

1 6 3 0 3

4 5 4 0 4

0 0 0 3 5

>> clc

>> a=zeros(8,8)

a =

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0

>> a(1:2:end,1:2:end)=1

a =

1 0 1 0 1 0 1 0

0 0 0 0 0 0 0 0

1 0 1 0 1 0 1 0

0 0 0 0 0 0 0 0

1 0 1 0 1 0 1 0

0 0 0 0 0 0 0 0

1 0 1 0 1 0 1 0

0 0 0 0 0 0 0 0

>> a(2:2:end,1:4:end)=1

a =

1 0 1 0 1 0 1 0

1 0 0 0 1 0 0 0

1 0 1 0 1 0 1 0

1 0 0 0 1 0 0 0

1 0 1 0 1 0 1 0

1 0 0 0 1 0 0 0

1 0 1 0 1 0 1 0

1 0 0 0 1 0 0 0

>> a(2:2:end,2:4:end)=1

a =

1 0 1 0 1 0 1 0

1 1 0 0 1 1 0 0

1 0 1 0 1 0 1 0

1 1 0 0 1 1 0 0

1 0 1 0 1 0 1 0

1 1 0 0 1 1 0 0

1 0 1 0 1 0 1 0

1 1 0 0 1 1 0 0

>> a=zeros(8,8);

>> a(1:2:end,1:2:end)=1;

>> a(2:2:end,1:4:end)=1;

>> a(2:2:end,2:4:end)=1

a =

1 0 1 0 1 0 1 0

1 1 0 0 1 1 0 0

1 0 1 0 1 0 1 0

1 1 0 0 1 1 0 0

1 0 1 0 1 0 1 0

1 1 0 0 1 1 0 0

1 0 1 0 1 0 1 0

1 1 0 0 1 1 0 0

>> eye(2)

ans =

1 0

0 1

>> eye(5)

ans =

1 0 0 0 0

0 1 0 0 0

0 0 1 0 0

0 0 0 1 0

0 0 0 0 1

>> magic(3)

ans =

8 1 6

3 5 7

4 9 2

>> x

x =

5 3 2 0 1

4 0 7 0 2

1 6 3 0 3

4 5 4 0 4

0 0 0 3 5

>> x=x(1,:)

x =

5 3 2 0 1

>> x(:)

ans =

5

3

2

0

1

>> v

v =

5 3 2 0

4 0 7 0

1 6 3 0

4 5 4 0

0 0 0 3

>> v(:)

ans =

5

4

1

4

0

3

0

6

5

0

2

7

3

4

0

0

0

0

0

3

>> diary off