

```
>> clc
>> x=[3 1 7 2 6]
      x =
         3     1     7     2     6
>> x(3)
      ans = 7
>> x(5)
      ans = 6
>> x(6)
      error: x(6): out of bound 5
>> x(end)
      ans = 6
>> a=1:5
      a =
         1     2     3     4     5
>> a=1:2:5
      a =
         1     3     5
>> a=1:1.5:5
      a =
         1.0000     2.5000     4.0000
>> b=1:-1:4
      b = [] (1x0)      %vacío
>> x
      x =
         3     1     7     2     6
>> a
      a =
         1.0000     2.5000     4.0000
>> length(x)
      ans = 5
>> length(a)
      ans = 3
>> x=[3 1 7 2 6]
      x =
         3     1     7     2     6
>> a=1:1.5:5
      a =
         1.0000     2.5000     4.0000
>> b=6:-2:1
      b =
         6     4     2
>> x(4)
      ans = 2
>> x(end)
      ans = 6
>> x(2:4)
      ans =
         1     7     2
>> x(5:-1:1)
      ans =
         6     2     7     1     3
>> x(end:-1:1)
      ans =
         6     2     7     1     3
>> x(1:2:5)
      ans =
         3     7     6
>> x([4 1 2])
      ans =
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      2   3   1
>> x
      x =
      3   1   7   2   6
>> sum(x)
      ans = 19
>> prod(x)
      ans = 252
>> mean(x)
      ans = 3.8000
>> sum(x)/length(x)
      ans = 3.8000
>> median(x)
      ans = 3
>> cumsum(x)
      ans =
      3   4   11   13   19
>> cumprod(x)
      ans =
      3   3   21   42   252
>> x
      x =
      3   1   7   2   6
>> x.*x
      ans =
      9   1   49   4   36
>> x.^x
      ans =
      27   1   823543   4   46656
>> 2*x
      ans =
      6   2   14   4   12
>> x/2
      ans =
      1.50000   0.50000   3.50000   1.00000   3.00000
>> x
      x =
      3   1   7   2   6
>> x=2*x
      x =
      6   2   14   4   12
>> x
      x =
      6   2   14   4   12
>> x=x/2
      x =
      3   1   7   2   6
>> n=7
      n = 7
>> z=1:n
      z =
      1   2   3   4   5   6   7
>> z=1:n/2
      z =
      1   2   3
>> x
      x =
      3   1   7   2   6
>> y=1:5
      y =

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      1   2   3   4   5
>> x.*y
    ans =
      3   2  21   8  30
>> x.^y
    ans =
      3   1  343  16  7776
>> r=x.^y
    r =
      3   1  343  16  7776
>> sum(r)
    ans = 8139

>> clc
>> d=1:2:15;
>> x=d.^(-2);
>> sum(x)
    ans = 1.2025
>> a=[3 1 7 2 6]
    a =
      3   1   7   2   6
>> a(2:2:5)
    ans =
      1   2
>> a(2:2:5)=8
    a =
      3   8   7   8   6
>> a(2:4)=-a(2:4)
    a =
      3  -8  -7  -8   6
>> n=5
    n = 5
>> clc
>> n=10;
>> x=2:n;
>> x(2:2:end)=-x(2:2:end);
>> sum(x.^-1)
    ans = 0.35437
>> z=n:2:2*n
    z =
    10  12  14  16  18  20
>> 5>8
    ans = 0
>> 5>3
    ans = 1
>> 5~=3
    ans = 1
>> (4>2) & (5>3)
    ans = 1
>> (4>2) + (5>3)
    ans = 2
>> 8 & 4
    ans = 1
>> 0 | (2>3)
    ans = 0
>> 5 | (2>3)
    ans = 1
>> a
    a =
      3  -8  -7  -8   6

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```
>> a>2
      ans =
      1  0  0  0  1
>> a==6
      ans =
      0  0  0  0  1
>> x=1:2:9
      x =
      1  3  5  7  9
>> %cuantos elementos de x son >3
>> x>3
      ans =
      0  0  1  1  1
>> sum(x>3)
      ans = 3
>> %Cuanto suman estos elementos >3
>> sum(x.*(x>3))
ans = 21

>> %Cuales son los >3
>> x.*(x>3)
      ans =
      0  0  5  7  9
>> x
      x =
      1  3  5  7  9
>> x(x>3)
      ans =
      5  7  9
>> sum(x(x>3))
      ans = 21
>> y=[12 10 8 18 15]
      y =
      12  10  8  18  15
>> sum(x.*y)/sum(x)
      ans = 13.720
>> %# cursos aprobados
>> sum(y>=10)
      ans = 4
>> y(y>=10)
      ans =
      12  10  18  15
>> length(y(y>=10))
      ans = 4
>> x(y>=10)
      ans =
      1  3  7  9
>> x
      x =
      1  3  5  7  9
>> y
      y =
      12  10  8  18  15
>> %PPA. X son los créditos, y son las notas. PPA promedio pond. de aprob.
>> sum(x(y>=10).*y(y>=10))/sum(x(y>=10))
      ans = 15.150
>> diary off
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