```
    This is a Classroom License for instructional use only.
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>> %Sean Basler
%Lab1 Section 1
%*****************
>> 2+25

ans =

    27

>> sqrt(25)

ans =

     5

>> 2+25-sqrt(25)

ans =

    22

>> a = 2+25

a =

    27

>> b = sqrt(25)

b =

     5

>> c = a-b

c =

    22

>> whos
  Name      Size            Bytes  Class     Attributes

  a         1x1                 8  double
  ans       1x1                 8  double
  b         1x1                 8  double
  c         1x1                 8  double

>> help sqrt
```

```
 sqrt   Square root.
    sqrt(X) is the square root of the elements of X. Complex
    results are produced if X is not positive.

    See also sqrtm, realsqrt, hypot.

    Overloaded methods:
       sym/sqrt

    Reference page in Help browser
       doc sqrt

>> help filter
 filter One-dimensional digital filter.
    Y = filter(B,A,X) filters the data in vector X with the
    filter described by vectors A and B to create the filtered
    data Y.  The filter is a "Direct Form II Transposed"
    implementation of the standard difference equation:

    a(1)*y(n) = b(1)*x(n) + b(2)*x(n-1) + ... + b(nb+1)*x(n-nb)
                          - a(2)*y(n-1) - ... - a(na+1)*y(n-na)

    If a(1) is not equal to 1, filter normalizes the filter
    coefficients by a(1).

    filter always operates along the first non-singleton dimension,
    namely dimension 1 for column vectors and non-trivial matrices,
    and dimension 2 for row vectors.

    [Y,Zf] = filter(B,A,X,Zi) gives access to initial and final
    conditions, Zi and Zf, of the delays.  Zi is a vector of length
    MAX(LENGTH(A),LENGTH(B))-1, or an array with the leading dimension
    of size MAX(LENGTH(A),LENGTH(B))-1 and with remaining dimensions
    matching those of X.

    filter(B,A,X,[],DIM) or filter(B,A,X,Zi,DIM) operates along the
    dimension DIM.

    Tip:  If you have the Signal Processing Toolbox, you can design a
    filter, D, using DESIGNFILT.  Then you can use Y = filter(D,X) to
    filter your data.

    See also filter2, filtfilt, filtic, designfilt.

    Note: FILTFILT, FILTIC and DESIGNFILT are in the Signal Processing
    Toolbox.

    Overloaded methods:
       SigLogSelector.filter
       gf/filter
       channel.filter
```

```
       ssm/filter
       regARIMA/filter
       gjr/filter
       garch/filter
       egarch/filter
       arima/filter
       LagOp/filter
       mfilt.filter
       adaptfilt.filter
       fints/filter
       fxptui.filter
       dfilt.filter
       timeseries/filter

    Reference page in Help browser
       doc filter

>>
```