octave:3> a = [2 2 -1 0 1; -1 -1 2 -3 1; 1 1 -2 0 -1; 0 0 1 1 1]
a =

```
  2   2  -1   0   1
 -1  -1   2  -3   1
  1   1  -2   0  -1
  0   0   1   1   1
```

octave:4> rref(a)
ans =

```
  1   1   0   0   1        x1 + x2 + x5 = 0
  0   0   1   0   1        x3 + x5 = 0
  0   0   0   1  -0        x4 =  0
  0   0   0   0   0

  x   x   x   x   x
  1   2   3   4   5
      |       |
      s       t
```

rref ==> reduced row echelon form

x1 + x2 + x5 = 0 x1 + s + t = 0
x3 + x5 = 0 x3 + t = 0
x4 = 0

leading variable
free variables ===> parameters like s, t, u ….