```
13.0
          x_8
     3.0
          -1.000000x_1 + 2.000000x_2 - 3.000000x_3 + 3.000000x_4 + 2.000000x_5 + 1.000000x_6 - 3.000000x_7
x_9
     1.0
          -1.000000x_1 - 2.000000x_2 + 2.000000x_3 + 1.000000x_4 + 3.000000x_5
                                                                              +2.000000x_7
x_{10}
x_{11}
     15.0
                      +3.000000x_2
                                            +3.0000000x_4 +1.0000000x_5
                                                                              -3.000000x_7
     9.0
          -3.000000x_1 + 3.000000x_2
                                            +3.000000x_4 +1.000000x_5
                                                                              +2.000000x_7
x_{12}
     3.0
          -1.000000x_1 +3.000000x_2 +2.000000x_3
                                                        -3.000000x_5 + 1.000000x_6
x_{13}
                                            +1.000000x_4 +1.000000x_5
     7.0
          +2.000000x_1 -2.000000x_2
                                                                              +1.000000x_7
x_{14}
x_{15}
     4.0
          -1.000000x_1
                                 +1.000000x_3 +1.000000x_4 +1.000000x_5 -3.000000x_6
          12.0
x_{16}
x_{1\underline{7}}
     4.0
          +3.000000x_1 -2.000000x_2
                                            +2.000000x_4 -2.000000x_5 -2.000000x_6 +3.000000x_7
     0.0
          -1.000000x_1 - 1.000000x_2 + 1.000000x_3 - 1.000000x_4 - 2.000000x_5 + 2.000000x_6
 z
```

No initialization required –; Proceed to Optimize.

```
+2.000000x_1 - 2.000000x_2 + 3.000000x_3 + 2.000000x_4 + 2.000000x_5 + 1.000000x_6 - 2.000000x_7
x_8
    13.0
     3.0
          x_9
     1.0
          -1.000000x_1 - 2.000000x_2 + 2.000000x_3 + 1.000000x_4 + 3.000000x_5
                                                                             +2.000000x_7
x_{10}
                     +3.000000x_2
    15.0
                                           +3.000000x_4 +1.000000x_5
                                                                             -3.000000x_7
x_{11}
x_{12}
     9.0
          -3.000000x_1 + 3.000000x_2
                                           +3.000000x_4 +1.000000x_5
                                                                             +2.000000x_7
          -1.000000x_1 + 3.000000x_2 + 2.000000x_3
                                                       -3.000000x_5 + 1.000000x_6
     3.0
x_{13}
x_{14}
     7.0
          +2.000000x_1 -2.000000x_2
                                           +1.000000x_4 +1.000000x_5
                                                                             +1.000000x_7
     4.0
          -1.000000x_1
                                +1.000000x_3+1.000000x_4+1.000000x_5-3.000000x_6\\
x_{15}
    12.0
x_{16}
          4.0
          +3.000000x_1 - 2.000000x_2
                                           +2.000000x_4 -2.000000x_5 -2.000000x_6 +3.000000x_7
x_{17}
          -1.000000x_1 - 1.000000x_2 + 1.000000x_3 - 1.000000x_4 - 2.000000x_5 + 2.000000x_6
     0.0
z
```

 $x_3$  enters and  $x_9$  leaves

```
16.0
        +1.000000x_1
                             -1.000000x_9 + 5.000000x_4 + 4.000000x_5 + 2.000000x_6 - 5.000000x_7
x_8
    1.0
         x_3
    3.0
         -1.666667x_1 - 0.666667x_2 - 0.666667x_9 + 3.000000x_4 + 4.333333x_5 + 0.666667x_6
x_{10}
    15.0
                   +3.000000x_2
                                       +3.0000000x_4 +1.0000000x_5
                                                                      -3.000000x_7
x_{11}
    9.0
        -3.000000x_1 + 3.000000x_2
                                       +3.000000x_4 +1.000000x_5
                                                                     +2.000000x_7
x_{12}
    5.0
         x_{13}
    7.0
         +2.000000x_1 -2.000000x_2
                                       +1.0000000x_4 +1.0000000x_5
                                                                     +1.000000x_7
x_{14}
    5.0
         x_{15}
    9.0
        +4.000000x_1 -3.000000x_2 +1.000000x_9 -2.000000x_4 -5.000000x_5
x_{16}
         +3.000000x_1 -2.000000x_2
                                       +2.000000x_4 -2.000000x_5 -2.000000x_6 +3.000000x_7
x_{17}
                                                 \overline{-1.3333333x_5} + 2.3333333x_6 - 1.000000x_7
         -1.333333x_1 - 0.3333333x_2 - 0.3333333x_9
    1.0
```

 $x_6$  enters and  $x_{15}$  leaves

```
19.75
                  +0.500000x_2 -1.250000x_9 +6.500000x_4 +5.250000x_5 -0.750000x_{15} -5.750000x_7
x_8
    1.625
         x_3
    4.25
         x_{10}
x_{11}
    15.0
                  +3.000000x_2
                                    +3.000000x_4 +1.000000x_5
                                                                -3.000000x_7
                                    +3.000000x_4 +1.000000x_5
    9.0
         -3.000000x_1 + 3.000000x_2
                                                                +2.000000x_7
x_{12}
   8.125
         -2.500000x_1 + 4.750000x_2
                           -0.875000x_9 + 3.250000x_4 - 0.625000x_5 - 0.625000x_{15} - 2.625000x_7
x_{13}
                                    +1.000000x_4 +1.000000x_5
    7.0
         +2.000000x_1 -2.000000x_2
                                                                +1.000000x_7
x_{14}
    1.875
         -0.500000x_1 + 0.250000x_2 - 0.125000x_9 + 0.750000x_4 + 0.625000x_5 - 0.375000x_{15} - 0.375000x_7
x_6
    9.0
         +4.000000x_1 -3.000000x_2 +1.000000x_9 -2.000000x_4 -5.000000x_5
x_{16}
x_{1\underline{7}}
    0.25
         5.3\overline{75}
```

 $x_2$  enters and  $x_{17}$  leaves

```
+0.800000x_1 - 0.200000x_{17} - 1.200000x_9 + 6.600000x_4 + 4.600000x_5 - 0.600000x_{15} - 5.000000x_7
   19.8
x_8
   1.7
      +0.700000x_1 - 0.300000x_{17} - 0.300000x_9 + 1.400000x_4 - 0.100000x_5 + 0.100000x_{15}
x_3
x_{10}
   4.2
      15.3
      x_{11}
   9.3
      x_{12}
   8.6
      +5.100000x_1 - 1.900000x_{17} - 0.400000x_9 + 4.200000x_4 - 6.800000x_5 + 0.800000x_{15} + 4.500000x_7
x_{13}
   6.8
      x_{14}
x_6
   1.9
      -0.100000x_1 - 0.100000x_{17} - 0.100000x_9 + 0.800000x_4 + 0.300000x_5 - 0.300000x_{15}
x_{16}
   8.7
      -0.800000x_1 + 1.200000x_{17} + 0.700000x_9 - 2.600000x_4 - 1.100000x_5 - 0.900000x_{15} - 4.500000x_7
      x_2
   0.1
   5.4
      z
```

 $x_4$  enters and  $x_{16}$  leaves

```
41.8846153846
                                                      -1.230769x_1 + 2.846154x_{17} + 0.576923x_9 - 2.538462x_{16} + 1.807692x_5 - 2.884615x_{15} - 16.423077x_7
 x_8
                                                      +0.269231x_1+0.346154x_{17}+0.076923x_9-0.538462x_{16}-0.692308x_5-0.384615x_{15}-2.423077x_7
 x_3
              6.38461538462
              15.5769230769
                                                      x_{10}
                                                      +3.692308x_1 + 0.461538x_{17} + 1.269231x_9 - 1.384615x_{16} - 4.423077x_5 - 0.346154x_{15} - 4.730769x_7
              27.3461538462
x_{11}
              21.3461538462
                                                      +0.692308x_1 + 0.461538x_{17} + 1.269231x_9 - 1.384615x_{16} - 4.423077x_5 - 0.346154x_{15} + 0.269231x_7 + 0.26927x_7 + 0.26027x_7 + 0.26027x_7 + 0.26027x_7 + 0.26027x_7 + 0.26027x_7 + 0.26027x_7
x_{12}
x_{13}
               22.6538461538
                                                      +3.807692x_1 + 0.038462x_{17} + 0.730769x_9 - 1.615385x_{16} - 8.576923x_5 - 0.653846x_{15} - 2.769231x_7
              8.80769230769
                                                      x_{14}
 x_6
              4.57692307692
                                                      3.34615384615
                                                      x_4
             0.769230769231
                                                      +1.538462x_1 - 0.307692x_{17} + 0.153846x_9 - 0.076923x_{16} - 1.384615x_5 + 0.230769x_{15} + 1.153846x_7
 x_2
                                                      -2.653846x_1 + 0.730769x_{17} - 0.115385x_9 - 0.692308x_{16} - 0.961538x_5 - 1.423077x_{15} - 4.615385x_7
              11.4230769231
```

 $x_{17}$  enters and  $x_2$  leaves

```
49.0
                            x_8
             7.25
                             x_3
             20.0
                             x_{10}
             28.5
                             +6.000000x_1 - 1.500000x_2 + 1.500000x_9 - 1.500000x_{16} - 6.500000x_5 + 0.000000x_{15} - 3.000000x_7
x_{11}
             22.5
                             x_{12}
x_{13}
           22.75
                             11.5
                             x_{14}
             5.25
                             +1.000000x_1 -0.875000x_2 +0.250000x_9 -0.375000x_{16} -1.250000x_5 -0.375000x_{15} -0.375000x_7
x_6
              4.5
                             +2.000000x_1 -1.500000x_2 +0.500000x_9 -0.500000x_{16} -2.500000x_5 +0.000000x_{15}
x_4
              2.5
                             x_{17}
            13.25
                             +1.000000x_1 -2.375000x_2 +0.250000x_9 -0.875000x_{16} -4.250000x_5 -0.875000x_{15} -1.875000x_7 -0.875000x_{15} -0.875000x_
```

 $x_1$  enters and Unbounded Dictionary!