```
7.0
       +1.000000x_1 +1.000000x_2 -3.000000x_3 +3.000000x_4 -2.000000x_5 -1.000000x_6
x_8
   1.0
       +2.0000000x_1 -1.0000000x_2
                              +2.000000x_4
                                                     +1.000000x_7
x_9
   9.0
       x_{10}
x_{11}
   4.0
       -3.000000x_1 + 1.000000x_2 + 3.000000x_3 + 1.000000x_4 - 2.000000x_5 + 2.000000x_6 + 1.000000x_7
   7.0
              +1.000000x_2 -2.000000x_3 -1.000000x_4 +1.000000x_5 -3.000000x_6 +1.000000x_7
x_{12}
   13.0
       x_{13}
      8.0
x_{14}
x_{15}
   15.0
       -2.000000x_1 + 2.000000x_2 + 3.000000x_3 + 2.000000x_4
                                             +1.000000x_6 -1.000000x_7
      11.0
x_{16}
x_{1\underline{7}}
   6.0
       -1.000000x_1
   0.0
                      +2.000000x_3 -2.000000x_4 +2.000000x_5
                                                     -2.000000x_7
```

No initialization required –; Proceed to Optimize.

```
+1.000000x_1 +1.000000x_2 -3.000000x_3 +3.000000x_4 -2.000000x_5 -1.000000x_6
x_8
  7.0
  1.0
    +2.000000x_1 - 1.000000x_2
                    +2.000000x_4
                                    +1.000000x_7
x_9
  9.0
    x_{10}
  4.0
    x_{11}
         x_{12}
  7.0
    13.0
x_{13}
x_{14}
  8.0
    15.0
    -2.000000x_1 + 2.000000x_2 + 3.000000x_3 + 2.000000x_4
                               +1.000000x_6 -1.000000x_7
x_{15}
  11.0
    x_{16}
  6.0
    x_{17}
               +2.000000x_3 -2.000000x_4 +2.000000x_5
  0.0
    -1.000000x_1
                                    -2.000000x_7
z
```

 x_3 enters and x_{17} leaves

```
1.0
                      +3.000000x_2 +1.000000x_{17} +4.000000x_4 +1.000000x_5
                                                                                  +3.000000x_7
x_8
     1.0
          +2.000000x_1 - 1.000000x_2
                                              +2.000000x_4
                                                                                  +1.000000x_7
x_9
     7.0
          x_{10}
     10.0
          -2.000000x_1 - 1.000000x_2 - 1.000000x_{17}
                                                          -5.000000x_5 + 1.000000x_6 - 2.000000x_7
x_{11}
          3.0
x_{12}
    17.0
          -2.333333x_1 - 2.333333x_2 - 0.666667x_{17} - 3.666667x_4
                                                                      +0.333333x_6 -5.000000x_7
x_{13}
          +4.000000x_1 +1.000000x_2 -1.000000x_{17} -3.000000x_4
     14.0
                                                                      -3.000000x_6 -5.000000x_7
x_{14}
    21.0
                                  -1.000000x_{17} + 1.000000x_4 - 3.000000x_5
          -1.000000x_1
                                                                                  -4.000000x_7
x_{15}
          -2.666667x_1 + 0.333333x_2 + 0.666667x_{17} - 1.3333333x_4 + 4.000000x_5 - 0.333333x_6 + 1.000000x_7
     7.0
x_{16}
     2.0
          +0.333333x_1 - 0.666667x_2 - 0.3333333x_{17} - 0.3333333x_4 - 1.000000x_5 - 0.333333x_6 - 1.000000x_7
x_3
          -0.333333x_1 \overline{-1.3333333x_2} -0.666667x_{17} -2.666667x_4
                                                                      -0.666667x_6 - 4.000000x_7
     4.0
```

 x_{-1} enters and Final Dictionary Solution: 4.0 Num Pivots: 1