```
1 C:\Users\AlanKing\Miniconda3\envs\MOSDEX-test\
  python.exe C:/Users/AlanKing/Documents/GitHub/
  MOSDEX-python/src/read-mosdex.py
2 YES: Mosdex problem sailco_1-3.json is a valid
  instance of Mosdex schema MOSDEXSchemaV1-3-ajk.json
 3
4 MODULE ['sailco']
5 ALGORITHM ['sailcoSolve']
 6
7 sailco
8 OBJECTIVE ['totalCost']
               ['periods', 'demands', 'parameters', '
 9 DATA
  production']
               ['ctCapacity_regular', 'ctBoat_regular
10 TERM
  ', 'ctBoat_extra', 'ctBoat_inventory', '
  ctBoat_lagged_inventory']
11 VARIABLE ['regular', 'extra', 'inventory']
12 CONSTRAINT ['ctCapacity', 'ctBoat', 'ctBoat_1']
13
14 **** Executing sailcoSolve ****
15
16 ***List the Tables***
17
18 **modules_table**
19 module_name|item_name
                                   |class_name|
  type_name | table_name
20 -----|-----|
  -----
21 sailco | periods
                                   DATA
  INPUT
            |sailco_periods
           demands
22 sailco
                                    IDATA
  INPUT |sailco_demands
23 sailco
           |parameters
                                    DATA
  INPUT |sailco_parameters
24 sailco | regular
                                    |VARIABLE
  CONTINUOUS|sailco_regular
25 sailco
          lextra
                                    | VARIABLE
  CONTINUOUS|sailco_extra
```

```
|inventory
                                       |VARIABLE
26 sailco
   CONTINUOUS|sailco_inventory
                                       |CONSTRAINT|
27 sailco
              |ctCapacity
             |sailco_ctCapacity
   LINEAR
                                       |CONSTRAINT|
28 sailco
              |ctBoat
   LINEAR
             |sailco_ctBoat
29 sailco
                                       |CONSTRAINT|
              ctBoat_1
             |sailco_ctBoat_1
   LINEAR
                                       |OBJECTIVE |
30 sailco
              | totalCost
  LINEAR
             |sailco_totalCost
              |ctCapacity_regular
31 sailco
                                       TERM
   LINEAR
             |sailco_ctCapacity_regular
              |ctBoat_regular
32 sailco
                                       TERM
   LINEAR
             |sailco_ctBoat_regular
              |ctBoat_extra
                                       TERM
33 sailco
             |sailco_ctBoat_extra
   LINEAR
34 sailco
              |ctBoat_inventory
                                       TERM
             |sailco_ctBoat_inventory
   LINEAR
35 sailco
             |ctBoat_lagged_inventory|TERM
             |sailco_ctBoat_lagged_inventory
   LINEAR
36
37 **sailco_ctBoat**
38 Period Row
                  |Sense|RHS
39 ----|----|----|
         |ctBoat_2|==
40 2
                        160.0
        |ctBoat_3|==
41 3
                        172.0
42 4
         |ctBoat_4|==
                        125.0
43
44 **sailco_ctBoat_1**
                |Sense|RHS
45 period|Row
46 ----|----|----
47 1
         ctBoat_1|==
                        130.0
48 1
        |ctBoat_1|==
                        150.0
49 1
         |ctBoat_1|==
                        162.0
         |ctBoat_1|==
50 1
                        15.0
51
52 **sailco ctBoat extra**
53 Row
           |Column |Coefficient
```

```
54 -----
55 ctBoat 1|extra 1|1.0
56 ctBoat 2|extra 2|1.0
57 ctBoat_3|extra_3|1.0
58 ctBoat_4|extra_4|1.0
59
60 **sailco_ctBoat_inventory**
61 Row
                     |Coefficient
      |Column
62 -----
63 ctBoat_1|inventory_1|-1.0
64 ctBoat_2|inventory_2|-1.0
65 ctBoat_3|inventory_3|-1.0
66 ctBoat_4|inventory_4|-1.0
67
68 **sailco_ctBoat_lagged_inventory**
          |Column |Coefficient
69 Row
70 -----
71 ctBoat_2|inventory_1|1.0
72 ctBoat_3|inventory_2|1.0
73 ctBoat_4|inventory_3|1.0
74
75 **sailco_ctBoat_regular**
76 Row
          |Column |Coefficient
77 -----|-----|
78 ctBoat_1|regular_1|1.0
79 ctBoat_2|regular_2|1.0
80 ctBoat_3|regular_3|1.0
81 ctBoat_4|regular_4|1.0
82
83 **sailco_ctCapacity**
84 period|Row
                    | Sense | RHS
85 -----|-----|----
        |ctCapacity_1|<=</pre>
86 1
                         40.0
      |ctCapacity_2|<=
87 2
                         40.0
88 3 |ctCapacity_3|<=
                         140.0
       |ctCapacity_4|<=</pre>
89 4
                         140.0
90
91 **sailco_ctCapacity_regular**
```

```
|Column |Coefficient
92 Row
93 -----
94 ctCapacity_1|regular_1|1.0
95 ctCapacity_2|regular_2|1.0
96 ctCapacity_3|regular_3|1.0
97 ctCapacity_4|regular_4|1.0
98
99 **sailco_demands**
100 period|demand
101 -----
102 1 | 40.0
103 2 | 60.0

      104 3
      |72.0

      105 4
      |25.0

106
107 **sailco_extra**
108 period | Column | LowerBound | UpperBound | Objective |
   Value
109 -----|-----|-----|-----|
        |extra_1|0.0 |infinity |450.0
                                          0.0
110 1
111 2 | extra_2|0.0 | infinity | 450.0 | 0.0
112 3 | extra_3|0.0 | infinity | 450.0 | 0.0
113 4 | extra_4|0.0 | infinity | 450.0 | 0.0
114
115 **sailco_inventory**
116 period | Column | LowerBound | UpperBound | Objective
   | Value
117 -----|------|------|
     |inventory_1|0.0 |infinity |450.0
118 1
       0.0
119 2 | inventory_2|0.0 | infinity | 450.0
       0.0
```

```
|inventory_3|0.0
                              |infinity |450.0
120 3
       10.0
       |inventory_4|0.0
121 4
                              |infinity |450.0
       0.0
122
123 **sailco_parameters**
124 name
                  Ivalue
125 -----
126 regularCost | 400.0
                |450.0
127 extraCost
128 capacity
                  40.0
129 initialInventory 10.0
130 inventoryCost | 20.0
131
132 **sailco_periods**
133 period
134 ----
135 1
136 2
137 3
138 4
139
140 **sailco_regular**
141 period | Column | LowerBound | UpperBound | Objective |
   Value
142 -----|------|------|-----|-
       |regular_1|0.0 |infinity |400.0
143 1
   .0
                            |infinity |400.0
        |regular_2|0.0
144 2
                                                10
   . 0
       |regular_3|0.0
                            |infinity |400.0
145 3
                                                10
   .0
       |regular_4|0.0 |infinity |400.0
146 4
                                                10
   .0
147
148 **sailco totalCost**
149 SUM( sailco_regular.objective * sailco_regular.
```

```
149 value + sailco_extra.objective * sailco_extra.
    value + sailco_inventory.objective *
    sailco_inventory.value )
150 --
151 0.0
152
153 **singletons_table**
154
155
156 Process finished with exit code 0
157
```