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1 C:\Users\AlanKing\Miniconda3\envs\MOSDEX-test\python.exe C:/Users/AlanKing/Documents/GitHub/
  coin-modeling-dev/mosdex-python/samples/sailco.py
2 YES: Mosdex problem ../data\sailco_1.3-ajk.json is a valid instance of Mosdex schema ../data
  \MOSDEXSchemaV1-3-ajk.json
3
4 **** Executing sailcoSolve ****
5
6 ***List the Tables***
7
8 **Modules**
9 module_name|item_name          |class_name|type_name |table_name
10 -----|-----|-----|-----|-----
11 sailco   |demands              |DATA      |INPUT    |sailco_demands
12 sailco   |parameters           |DATA      |INPUT    |sailco_parameters
13 sailco   |regular              |VARIABLE  |CONTINUOUS|sailco_regular
14 sailco   |extra                |VARIABLE  |CONTINUOUS|sailco_extra
15 sailco   |inventory            |VARIABLE  |CONTINUOUS|sailco_inventory
16 sailco   |ctCapacity           |CONSTRAINT|LINEAR    |sailco_ctCapacity
17 sailco   |ctBoat               |CONSTRAINT|LINEAR    |sailco_ctBoat
18 sailco   |ctBoat_1             |CONSTRAINT|LINEAR    |sailco_ctBoat_1
19 sailco   |totalCost            |OBJECTIVE |LINEAR    |sailco_totalCost
20 sailco   |ctCapacity_regular   |TERM      |LINEAR    |sailco_ctCapacity_regular
21 sailco   |ctBoat_regular       |TERM      |LINEAR    |sailco_ctBoat_regular
22 sailco   |ctBoat_extra         |TERM      |LINEAR    |sailco_ctBoat_extra
23 sailco   |ctBoat_inventory     |TERM      |LINEAR    |sailco_ctBoat_inventory
24 sailco   |ctBoat_lagged_inventory|TERM      |LINEAR    |sailco_ctBoat_lagged_inventory
25
26 **Metadata**
27 module_name|item_name          |class_name|name      |type  |usage      |
  key_type   |source            |          |          |      |          |
28 -----|-----|-----|-----|-----|-----|-----
29 sailco   |demands           |DATA      |Periods  |INTEGER|None       |KEY
  |None
30 sailco   |demands           |DATA      |Demands  |DOUBLE |VALUE      |None
  |None
31 sailco   |parameters        |DATA      |Parameter|STRING |None       |KEY
  |None
32 sailco   |parameters        |DATA      |Value    |DOUBLE |VALUE      |None
  |None
33 sailco   |regular           |VARIABLE  |Periods  |INTEGER|None       |
  FOREIGN_KEY|sailco_demands_Periods
34 sailco   |regular           |VARIABLE  |Name     |STRING |None       |
  COL_INDEX |None
35 sailco   |regular           |VARIABLE  |LowerBound|DOUBLE |LOWER_BOUND|None
  |None
36 sailco   |regular           |VARIABLE  |UpperBound|DOUBLE |UPPER_BOUND|None
  |None
37 sailco   |regular           |VARIABLE  |Objective|DOUBLE |OBJECTIVE_COEFFICIENT|
  FOREIGN_KEY|sailco_parameters_Parameter
38 sailco   |regular           |VARIABLE  |Value    |DOUBLE |VARIABLE_VALUE|None
  |None
39 sailco   |extra             |VARIABLE  |Periods  |INTEGER|None       |
  FOREIGN_KEY|sailco_demands_Periods
40 sailco   |extra             |VARIABLE  |Name     |STRING |None       |
  COL_INDEX |None
41 sailco   |extra             |VARIABLE  |LowerBound|DOUBLE |LOWER_BOUND|None
  |None
42 sailco   |extra             |VARIABLE  |UpperBound|DOUBLE |UPPER_BOUND|None
  |None
43 sailco   |extra             |VARIABLE  |Objective|DOUBLE |OBJECTIVE_COEFFICIENT|
  FOREIGN_KEY|sailco_parameters_Parameter
44 sailco   |extra             |VARIABLE  |Value    |DOUBLE |VARIABLE_VALUE|None
  |None
45 sailco   |inventory         |VARIABLE  |Periods  |INTEGER|None       |
  FOREIGN_KEY|sailco_demands_Periods

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46	sailco	inventory	VARIABLE	Name	STRING	None	
	COL_INDEX	None					
47	sailco	inventory	VARIABLE	Inventory	DOUBLE	LOWER_BOUND	None
		None					
48	sailco	inventory	VARIABLE	UpperBound	DOUBLE	UPPER_BOUND	None
		None					
49	sailco	inventory	VARIABLE	Objective	DOUBLE	OBJECTIVE_COEFFICIENT	
	FOREIGN_KEY	sailco_parameters_Parameter					
50	sailco	inventory	VARIABLE	Value	DOUBLE	VARIABLE_VALUE	None
		None					
51	sailco	ctCapacity	CONSTRAINT	Periods	INTEGER	None	
	FOREIGN_KEY	sailco_demands_Periods					
52	sailco	ctCapacity	CONSTRAINT	Name	STRING	None	
	COL_INDEX	None					
53	sailco	ctCapacity	CONSTRAINT	Sense	STRING	SENSE	None
		None					
54	sailco	ctCapacity	CONSTRAINT	RHS	DOUBLE	RHS	
	FOREIGN_KEY	sailco_parameters_Parameter					
55	sailco	ctCapacity	CONSTRAINT	Value	DOUBLE	CONSTRAINT_VALUE	None
		None					
56	sailco	ctBoat	CONSTRAINT	Periods	INTEGER	None	
	FOREIGN_KEY	sailco_demands_Periods					
57	sailco	ctBoat	CONSTRAINT	Name	STRING	None	
	ROW_INDEX	None					
58	sailco	ctBoat	CONSTRAINT	Sense	STRING	SENSE	
		None					
59	sailco	ctBoat	CONSTRAINT	RHS	DOUBLE	RHS	
	FOREIGN_KEY	sailco_parameters_Parameter					
60	sailco	ctBoat	CONSTRAINT	Value	DOUBLE	CONSTRAINT_VALUE	
		None					
61	sailco	ctBoat_1	CONSTRAINT	Periods	INTEGER	None	
	FOREIGN_KEY	sailco_demands_Periods					
62	sailco	ctBoat_1	CONSTRAINT	Name	STRING	None	
	ROW_INDEX	None					
63	sailco	ctBoat_1	CONSTRAINT	Sense	STRING	SENSE	
		None					
64	sailco	ctBoat_1	CONSTRAINT	RHS	DOUBLE	RHS	
	FOREIGN_KEY	sailco_parameters_Parameter					
65	sailco	ctBoat_1	CONSTRAINT	Value	DOUBLE	CONSTRAINT_VALUE	None
		None					
66	sailco	totalCost	OBJECTIVE	Value	DOUBLE	OBJECTIVE_VALUE	None
		None					
67	sailco	ctCapacity_regular	TERM	Name	STRING	None	
	ROW_INDEX	None					
68	sailco	ctCapacity_regular	TERM	Name	STRING	None	
	COL_INDEX	None					
69	sailco	ctCapacity_regular	TERM	Value	DOUBLE	MATRIX_ENTRY	None
		None					
70	sailco	ctBoat_regular	TERM	Name	STRING	None	
	ROW_INDEX	None					
71	sailco	ctBoat_regular	TERM	Name	STRING	None	
	COL_INDEX	None					
72	sailco	ctBoat_regular	TERM	Value	DOUBLE	MATRIX_ENTRY	None
		None					
73	sailco	ctBoat_extra	TERM	Name	STRING	None	
	ROW_INDEX	None					
74	sailco	ctBoat_extra	TERM	Name	STRING	None	
	COL_INDEX	None					
75	sailco	ctBoat_extra	TERM	Value	DOUBLE	MATRIX_ENTRY	None
		None					
76	sailco	ctBoat_inventory	TERM	Name	STRING	None	
	ROW_INDEX	None					
77	sailco	ctBoat_inventory	TERM	Name	STRING	None	
	COL_INDEX	None					
78	sailco	ctBoat_inventory	TERM	Value	DOUBLE	MATRIX_ENTRY	None
		None					

79	sailco	ctBoat_lagged_inventory	TERM	Name	STRING	None	
	ROW_INDEX	None					
80	sailco	ctBoat_lagged_inventory	TERM	Name	STRING	None	
	COL_INDEX	None					
81	sailco	ctBoat_lagged_inventory	TERM	Value	DOUBLE	MATRIX_ENTRY	
	None	None					
82							
83	**Independent Variables (Columns)**						
84	module	variable	type	lower_bound	upper_bound	value	dual
85	-----	-----	-----	-----	-----	-----	-----
86	sailco	regular_1	CONTINUOUS	0	infinity	None	None
87	sailco	regular_2	CONTINUOUS	0	infinity	None	None
88	sailco	regular_3	CONTINUOUS	0	infinity	None	None
89	sailco	regular_4	CONTINUOUS	0	infinity	None	None
90	sailco	extra_1	CONTINUOUS	0	infinity	None	None
91	sailco	extra_2	CONTINUOUS	0	infinity	None	None
92	sailco	extra_3	CONTINUOUS	0	infinity	None	None
93	sailco	extra_4	CONTINUOUS	0	infinity	None	None
94	sailco	inventory_1	CONTINUOUS	0	infinity	None	None
95	sailco	inventory_2	CONTINUOUS	0	infinity	None	None
96	sailco	inventory_3	CONTINUOUS	0	infinity	None	None
97	sailco	inventory_4	CONTINUOUS	0	infinity	None	None
98							
99	**Dependent Variables (Rows)**						
100	module	variable	type	lower_bound	upper_bound	value	dual
101	-----	-----	-----	-----	-----	-----	-----
102	sailco	ctCapacity_1	LINEAR	infinity	40	None	None
103	sailco	ctCapacity_2	LINEAR	infinity	40	None	None
104	sailco	ctCapacity_3	LINEAR	infinity	40	None	None
105	sailco	ctCapacity_4	LINEAR	infinity	40	None	None
106	sailco	ctBoat_2	LINEAR	60	60	None	None
107	sailco	ctBoat_3	LINEAR	72	72	None	None
108	sailco	ctBoat_4	LINEAR	25	25	None	None
109	sailco	ctBoat_1	LINEAR	30	30	None	None
110	sailco	OBJECTIVE	LINEAR	infinity	infinity	None	None
111							
112	**Linear Expressions (Matrix Entries)**						
113	Module	Name	Name:1	Coefficient			
114	-----	-----	-----	-----			
115	sailco	ctCapacity_1	regular_1	1.0			
116	sailco	ctCapacity_2	regular_2	1.0			
117	sailco	ctCapacity_3	regular_3	1.0			
118	sailco	ctCapacity_4	regular_4	1.0			
119	sailco	ctBoat_2	regular_2	1.0			
120	sailco	ctBoat_2	extra_2	1.0			
121	sailco	ctBoat_2	inventory_2	-1.0			
122	sailco	ctBoat_2	inventory_1	1.0			
123	sailco	ctBoat_3	regular_3	1.0			
124	sailco	ctBoat_3	extra_3	1.0			
125	sailco	ctBoat_3	inventory_3	-1.0			
126	sailco	ctBoat_3	inventory_2	1.0			
127	sailco	ctBoat_4	regular_4	1.0			
128	sailco	ctBoat_4	extra_4	1.0			
129	sailco	ctBoat_4	inventory_4	-1.0			
130	sailco	ctBoat_4	inventory_3	1.0			
131	sailco	ctBoat_1	regular_1	1.0			
132	sailco	ctBoat_1	extra_1	1.0			
133	sailco	ctBoat_1	inventory_1	-1.0			
134							
135	**KEYS**						
136							
137	KEY:	sailco_demands_Periods					
138	DEPENDENCIES:						
139		sailco_regular	(VARIABLE)				
140		sailco_extra	(VARIABLE)				
141		sailco_inventory	(VARIABLE)				

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142          sailco_ctCapacity (CONSTRAINT)
143          sailco_ctBoat      (CONSTRAINT)
144          sailco_ctBoat_1    (CONSTRAINT)
145
146      KEY:          sailco_parameters_Parameter
147      DEPENDENCIES:
148          sailco_regular      (VARIABLE)
149          sailco_inventory    (VARIABLE)
150          sailco_ctCapacity   (CONSTRAINT)
151          sailco_ctBoat       (CONSTRAINT)
152          sailco_ctBoat_1     (CONSTRAINT)
153
154 Process finished with exit code 0
155
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