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**Algorithm 1** Parse Simulink Model Data

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**INPUT:** source directory of all slx or mdl model files

**OUTPUT:** json data file for each model

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1: prepare the list for all slx or mdl model files
2: for each model file in the list do
3:   create a node that represents the model
4:   prepare the list for all blocks in the model
5:   for each block in the list do
6:     create a node that represents the block
7:     create a relationship that connects the block with the model
8:   end for
9:   prepare the list for all ports in the model
10:  for each port in the list do
11:    create a node that represents the port
12:    create a relationship that connects the port with the corresponding
        block
13:  end for
14:  prepare the list for all lines/signals in the model
15:  for each line in the list do
16:    create a relationship that connects the line with two port nodes
17:  end for
18:  create a json file for each model
19: end for
```

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