Algorithm 1 Parse Simulink Model Data

    INPUT: source directory of all slx or mdl model files
    OUTPUT:json data file for each model
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 corresponding port nodes
17:     **end for**
18:     create a json file for each model
19: **end for**