Pseudo Code for Simple Inventory System Simulation





// Demands are specified and given.   
// One-pass Algorithm.

StaticDeterministicSISSimulation

1 

2 

3 **for** **to****inc**

4 

5;

6 **if** 

7 

8 **else**

9 

10 **if** 

11 

12 **else**

13 

14 

15 **end**



// Demands are stochastically determined in advance.

StaticStochasticSISSimulation

1 

2 StaticDeterministicSISSimulation

3 **end**

// Stochastic demands are dynamically generated.

DynamicStochasticSISSimulation

1 

2 

3 **while** 

4 ;

5;

6 

7 **if** 

8 ;

9 **if** 

10 

11 **else**

12 

13 ;

14 

15 **end**



// Stochastic demands are dynamically generated, as well as the delivery lag is stochastically determined when an order is placed.

DynamicStochasticSISwDeliveryLagSimulation

1 ;

2 

3 **while** 

4 ;

5 **if**  // previously reorder

6

7

8

9

10

11

12 **else** //no previously reorder

13

14

15

16 **if** l <0

17

18

19

20

21

22

23

24

25

26 //lag after reorder

27

28

29

30 **else**

31

32

33

34

35

36

37

38

39

40

41 

42 **end**



// The interarrivals of demands are stochastically simulated and each arrival decreases the inventory by 1. The order delivery lags are also dynamically simulated.

SISwDeliveryLagAndReleasticDemandSimulation

1 

2 

3 

4 **while** 