The Scenario:
Collins Lighting sells only two products – a clip-on desk lamp (eco-friendly shade and eco-friendly light bulb) for $15 and a package of 3 60-watt bulbs (same eco-friendly bulbs which are in the lamp) for $12. Collins buys these lamps from only one supplier (Lamps R Us) for $6. Collins buys the bulbs from only one supplier (Bulbs R Us) for $5.00 a package. Although most business scenarios are far more complex, this should give you some appreciation for the nature of transaction processing, which is a standard business process.

The Players (number in () is the number of people for that role):
(1 ) Customer (Plays 3 roles: Anita Light, Starr E. Night, N. O. Bright)
(1 ) Customer (Plays 3 roles: I.M. Dark, Ann E. Lite, Dawn O’Day)
(1 ) Customer (Plays 3 roles: M. N. Bean, Nil Sunshine, Sunny Free)
(1 ) Customer (Plays 3 roles: O. Star, Lou R. Shade, E Klips)
(3 ) Order Entry Clerks (Takes the customer’s order and notifies customer of expected shipping date via Email)
(2 ) Purchasing Clerk (Orders lamps when notified that inventory is low, confirms new shipments and sends invoice from supplier to Accounting)
(3 ) Warehouse Worker (Checks inventory; Ships out orders and notifies customer that item has shipped; via Email Receives new inventory after it has been checked by Purchasing)
(3 ) Accounting (Makes accounting entries into Collins’s books; Pays the supplier)
(1 ) Supplier (Receives orders from Collins; Ships lamps). Also plays owner Shawn Collins

Teams of 16 -- 15 roles plus one observer

Assumptions:
- There are 30 lamps and 15 packages of bulbs in inventory at the beginning of Day 1.
- The lamps come with a bulb inside its box.
- Order entry clerk (in showroom) cannot see inventory (in warehouse); Must rely on warehouse worker for inventory status.
- Customer must be advised of the expected shipping date by the order entry clerk before finalizing the order with the order entry clerk. If the customer isn’t happy with the expected shipping date, the order can be canceled.
- Orders are shipped from the warehouse on the same day they are ordered if inventory is available. If not, they are shipped as soon as inventory is available. A partial order can be shipped but only complete product orders can be shipped. (If an order has lamps and bulbs but there aren’t enough bulbs but there are enough lamps, the lamps can be shipped. The bulbs portion of order can be shipped when there are enough bulbs to complete the number of bulbs ordered.) Invoice is sent with the shipment. The invoice will either be marked paid or show amount due.
- When the quantity of lamps in inventory falls below 16, Collins Lighting orders 20 more at the end of that day. These arrive two days later (at the beginning of the day – for example: order on Day 1, receive on Day 3) along with an invoice (bill) from the supplier.
- When the quantity of bulb packages in inventory falls below 11, Collins Lighting orders 10 more at the end of that day. These arrive two days later (at the beginning of the day) along with an invoice (bill) from the supplier.
- Collins pays invoices the day after the shipment arrives, but only after the Purchasing Clerk has OK’d the order by indicating all items ordered were received. If there are missing items, the Purchasing Clerk will communicate that to Collins.
- The cost of shipping to the customer is borne by Collins Lighting and is calculated by the warehouse worker as $10 for 5 or fewer lamps and $25 for 6-10 lamps. Shipping for bulbs is $1 per package of bulbs.
- Assume that there is no sales tax and no credit card fees.