```
OUTPUT "How many buyers are at the auction?"
INPUT no of buyers
DECLARE buyer list: ARRAY[1: no of buyers] OF INTEGER
FOR i ← 1 TO no_of_buyers
  buyer list[i] ← i
NEXT
auction ← TRUE
WHILE auction = TRUE DO
  found ← FALSE
  WHILE found = FALSE DO
    OUTPUT "Please enter an item: "
    INPUT item
    FOR i ← 1 TO number_of_items
      IF item = item list[i]
        THEN
          OUTPUT "Item found"
          OUTPUT "Item: ", item_list[i]
          OUTPUT "Item number: ", item_number[i]
          OUTPUT "Description: ", description list[i]
          OUTPUT "Current highest bid: ", current highest bid[i]
          found ← TRUE
          item index = i
      ENDIF
    NEXT
    IF found = FALSE
      THEN
        OUTPUT "Item is not in the auction!"
    ENDIF
  ENDWHILE
```

```
buyer valid ← FALSE
 WHILE buyer_valid = FALSE DO
   OUTPUT "Please enter your buyer number: "
    INPUT buyer number
    FOR i ← 1 TO no_of_buyers
      IF buyer_number = i
        THEN
          buyer valid = TRUE
      ENDIF
    IF buyer valid = FALSE
      THEN
        OUTPUT "Invalid buyer number!"
    ENDIF
  ENDWHILE
 bid valid ← FALSE
 WHILE bid valid = FALSE
    OUTPUT "Please enter a bid: "
    INPUT bid
    IF bid > current_highest_bid[item_index]
      THEN
        OUTPUT "Your bid is successful!"
        current highest bid[item index] ← bid
        number of bids[item index] ← number of bids[item index] + 1
        bid valid = True
      ELSE
        OUTPUT "Your bid is too low!\nPlease bid again"
    ENDIF
 OUTPUT "Would you like to continue bidding? y/n"
  INPUT answer
 IF answer = "n"
    THEN
      auction ← FALSE
  ENDIF
ENDWHILE
OUTPUT "Auction ended!"
```