

*#refer to Task1.docx for setup code*

**OUTPUT “How many buyers are at the auction? ”**

**INPUT** no\_of\_buyers

**DECLARE** buyer\_list: **ARRAY**[1: no\_of\_buyers] **OF INTEGER**

**FOR** i  $\leftarrow$  1 **TO** no\_of\_buyers

    buyer\_list[i]  $\leftarrow$  i

**NEXT**

auction  $\leftarrow$  **TRUE**

**WHILE** auction = **TRUE DO**

    found  $\leftarrow$  **FALSE**

**WHILE** found = **FALSE DO**

**OUTPUT “Please enter an item: ”**

**INPUT** item

**FOR** i  $\leftarrow$  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  $\leftarrow$  **TRUE**

                    item\_index = i

**ENDIF**

**NEXT**

**IF** found = **FALSE**

**THEN**

**OUTPUT “Item is not in the auction!”**

**ENDIF**

**ENDWHILE**

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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

```

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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
    ENDWHILE

    OUTPUT "Would you like to continue bidding? y/n"
    INPUT answer
    IF answer = "n"
        THEN
            auction ← FALSE
        ENDIF
    ENDWHILE

    OUTPUT "Auction ended!"

```