

a) I ~~the~~ H is a logic error in line 12.

If ~~the~~ the program reads an unrecognisable message, the system is turned off.

II (12) ELSE

(13) ~~READ~~ ^{GO TO} NEXT Message Header

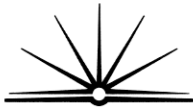
(14) ENDIF

III The data types of each of these messages are: Event \rightarrow String

Ticket \rightarrow Read Number

System Date/System Fine \rightarrow Integer

IV	System ϵ	PRINT TICKET	Event Number	Last Event Number	Event tickets available	Number tickets sold
	ON		2	1	1	0
	ON	1		2	1	
	ON	2				
	ON	3				
	ON	4				
	ON	5				
	ON	6				
	ON	7				
	ON	8				



A further error in the program is in line 36 because ~~it says~~ it says "FOR ~~PrintTicket~~ PrintTicket = 1 to Number of Tickets Sold" but if no tickets have been sold, this process has no terminating value. Another error is in line ~~30~~²⁹ where it says "~~EventTicketsAvailable = EventTicketsAvailable - NumberTicketsSold~~"
The variable in the equation already has a value and since it is in "IF EventTickets Available < 0 > THEN" because there will never be less than 0 tickets available.

b) BEGIN

Reports is an array of Ticket Array records
indexed from 1 to 999
Ticket Array is a record containing

Event Number, Integer

Event Name, string

Tickets sold, Integer

END

FOR ^{row} ~~column~~ = 1 TO 999

FOR ^{column} ~~row~~ = 1 TO ~~999~~ 3

set TicketArray (^{row} ~~column~~, ^{column} ~~row~~) to user input

ENDFOR

ENDFOR

count = 1

set ^{ticketArray} ~~row~~ (count, 1) to min

while count < 1000

IF TicketArray (count, 1) > TicketArray (count+1, 1)

~~Swap~~ Swap TicketArray (count, 1) and TicketArray (count+1, 1)

ENDIF

count = count + 1

ENDWHILE

FOR row = 1 TO 999

FOR column = 2 TO 3

Print TicketArray (row, column)

ENDFOR

ENDFOR

END

c) Online documentation is documentation that is on the internet. It can be constantly upgraded and changed, but to access it you need the internet. Paper documentation is also known as hardcopy. It is the traditional way of providing documentation to the user. The user can have it printed with them wherever they choose and it is useful for quick referencing. It however cannot be updated, thus the possibility arises that it can become outdated very early. On-line documentation would be very suitable for the ticket agency. Everyone has access to the internet and the documentation could be constantly upgraded, updated to deal with new errors, problems that the users come upon.