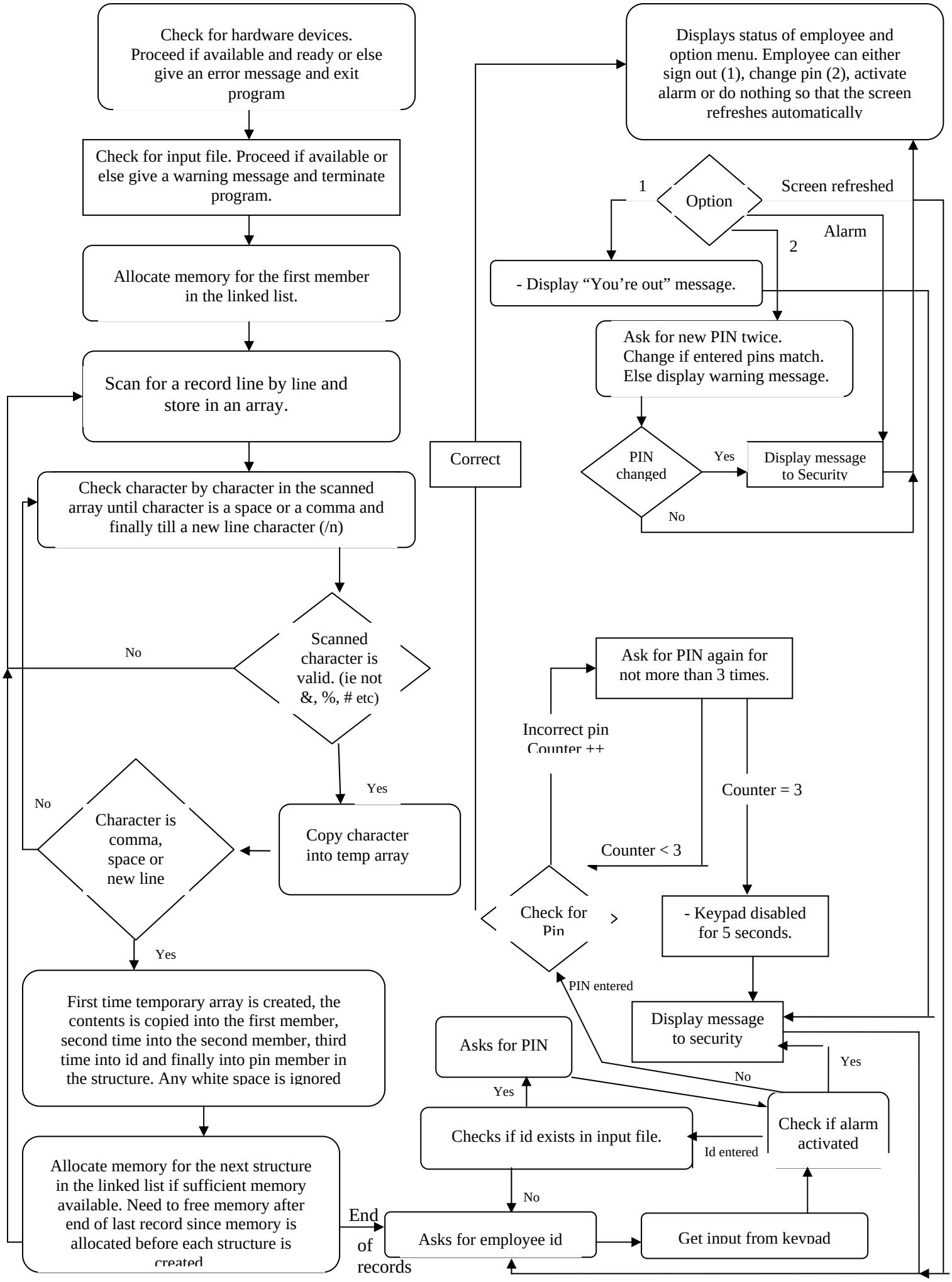
Check for hardware devices. Proceed if available and ready or else give an error message and exit program
Check for input file. Proceed if available or else give a warning message and terminate program.
Allocate memory for the first member in the linked list.
Scan for a record line by line and store in an array.
Check character by character in the scanned array until character is a space or a comma and finally till a new line character (/n)
Scanned character is valid. (ie not &, %, # etc)
No
Yes
Copy character into temp array
Character is comma, space or new line
No
Yes
First time temporary array is created, the contents is copied into the first member, second time into the second member, third time into id and finally into pin member in the structure. Any white space is ignored
Allocate memory for the next structure in the linked list if sufficient memory available. Need to free memory after end of last record since memory is allocated before each structure is created
End of records
Asks for employee id
Get input from keypad
Check if alarm activated
Yes
No
Id entered
Checks if id exists in input file.
Yes
No
Asks for PIN
PIN entered
Check for Pin
Incorrect pin Counter ++
Counter < 3
Counter = 3
Ask for PIN again for not more than 3 times.
- Keypad disabled for 5 seconds.
Display message to security
Correct
Displays status of employee and option menu. Employee can either sign out (1), change pin (2), activate alarm or do nothing so that the screen refreshes automatically
Option
1
2
Screen refreshed
Alarm
- Display "You're out" message.
Ask for new PIN twice. Change if entered pins match. Else display warning message.
PIN changed
Yes
No
Display message to Security