Ain-Shams university
3rd computer and systems Engineering

REPORT

Memory Contiguous Allocation Simulator

Provided by:

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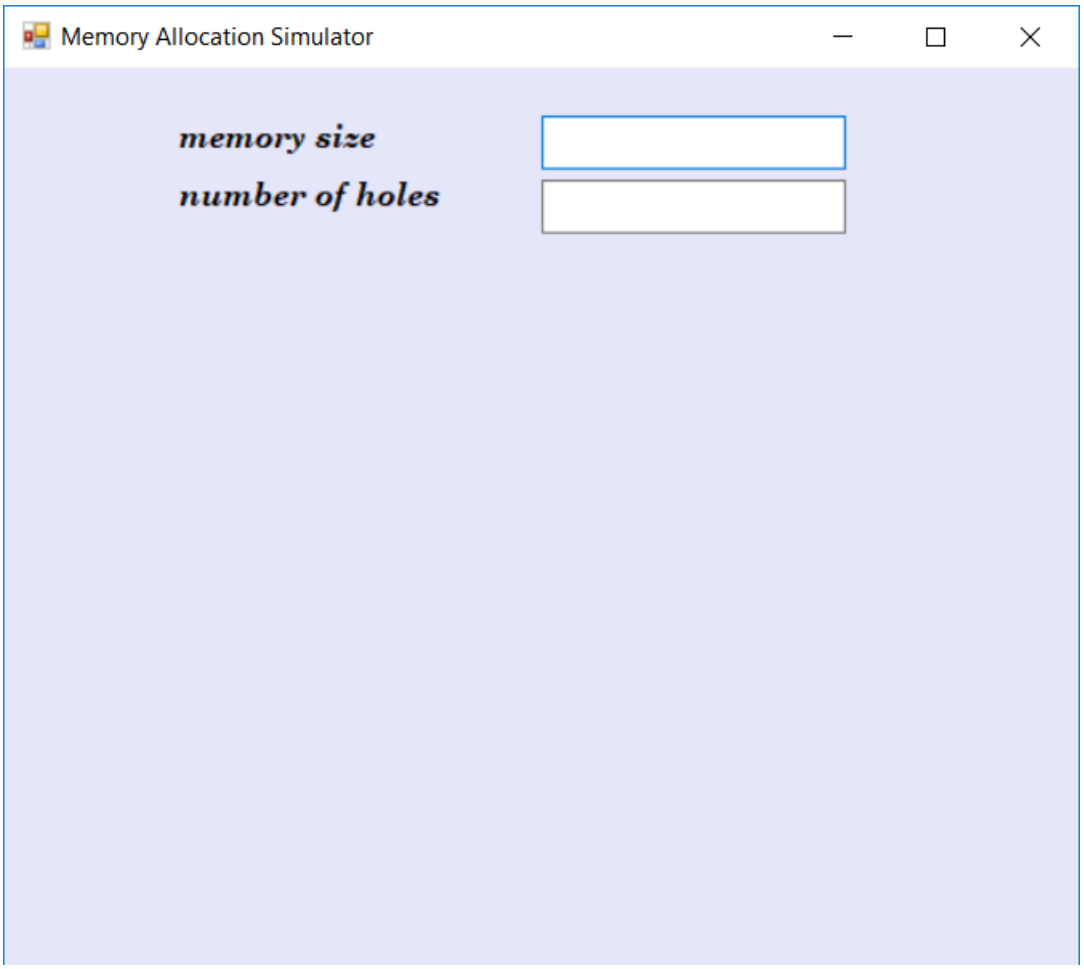
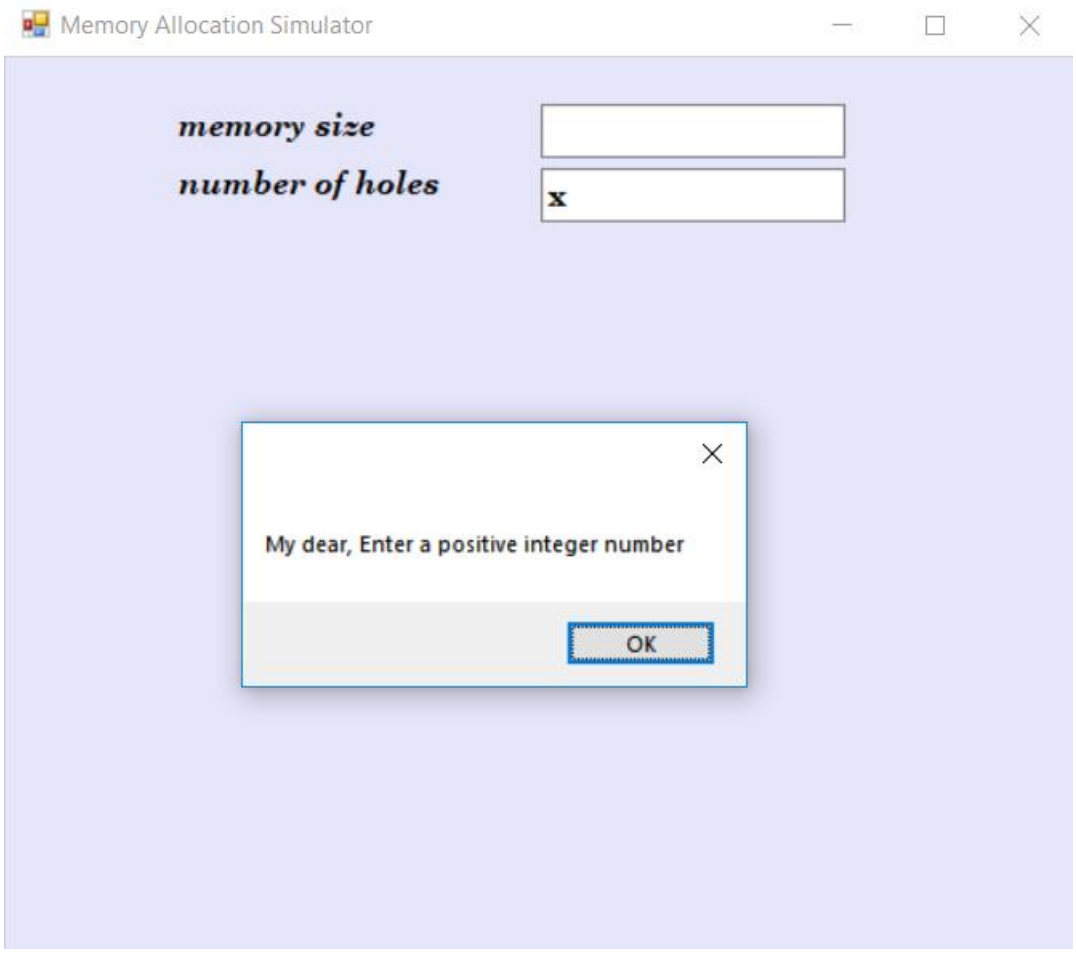
Contents:

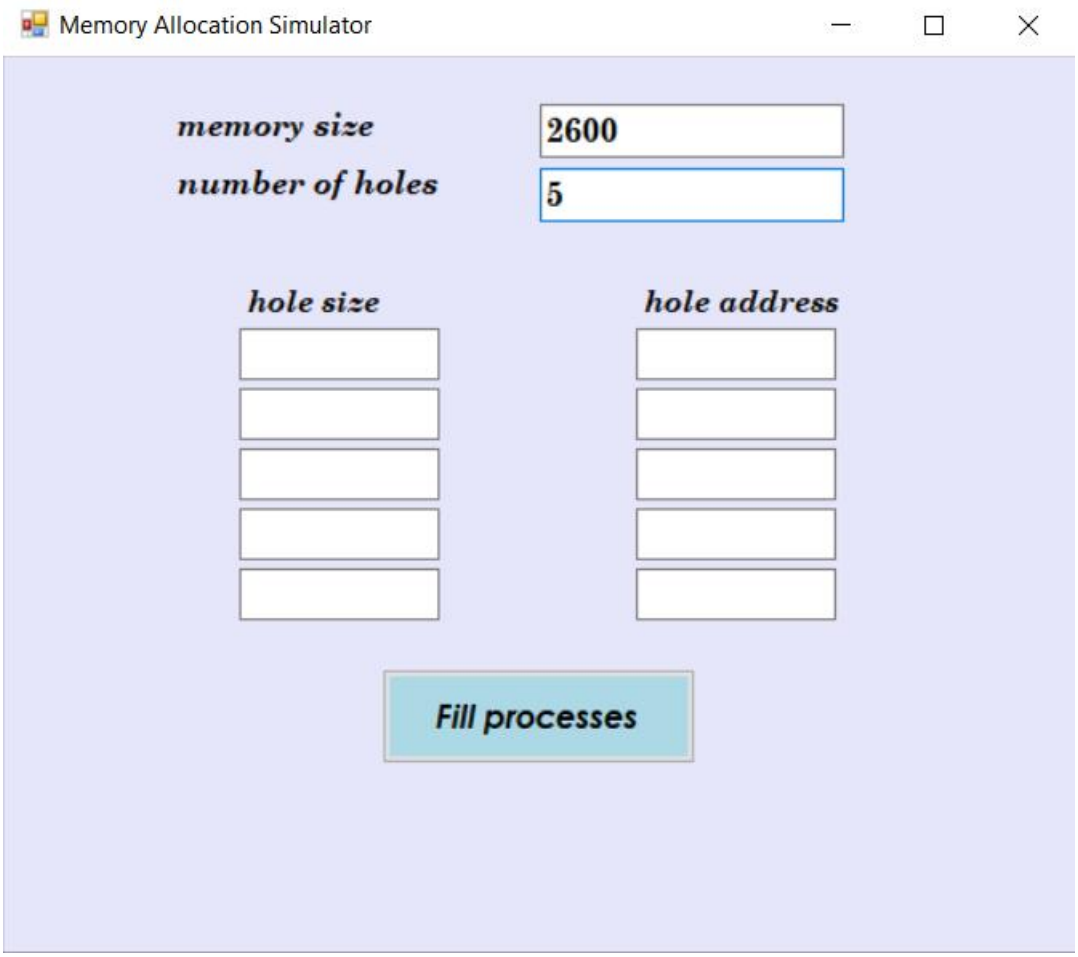
1. After running the .exe file, enter memory size and number of holes.



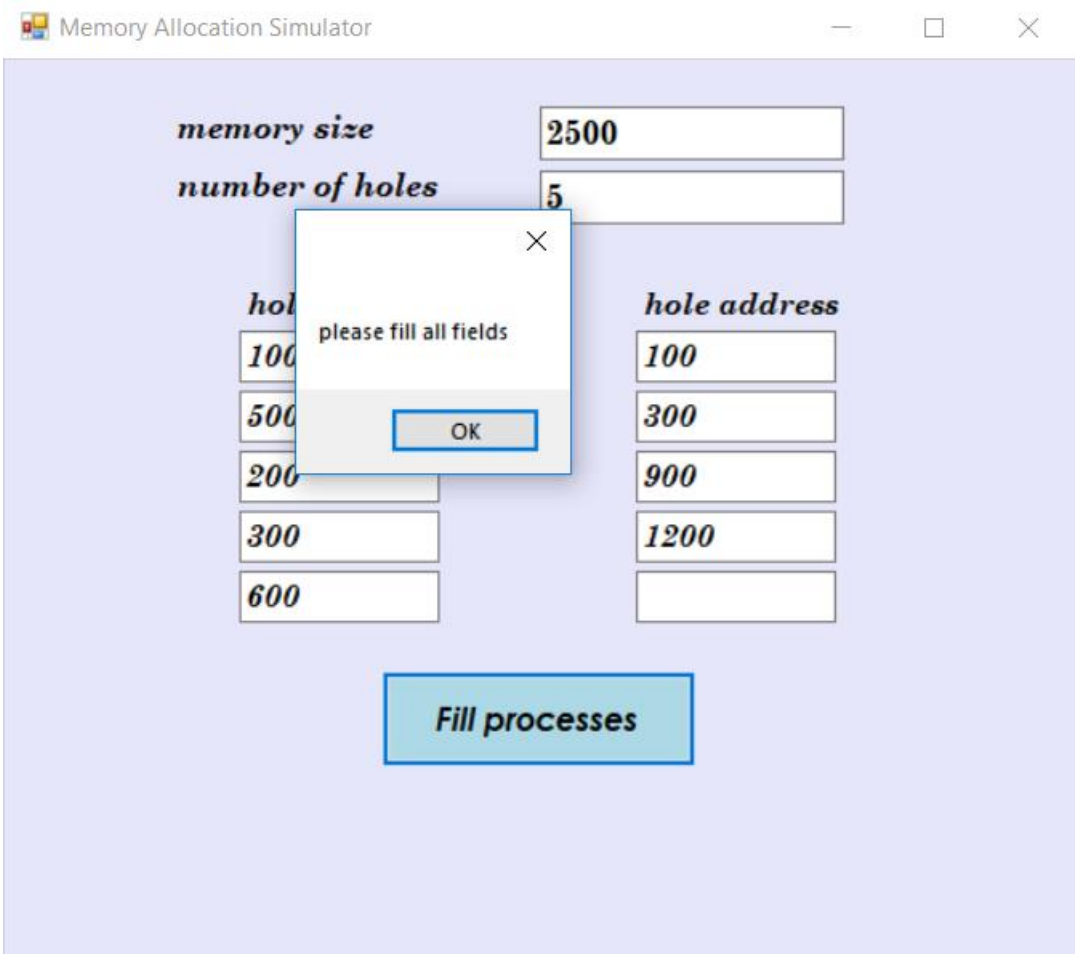
Both should be positive integer numbers greater than zero; otherwise an error message will appear.



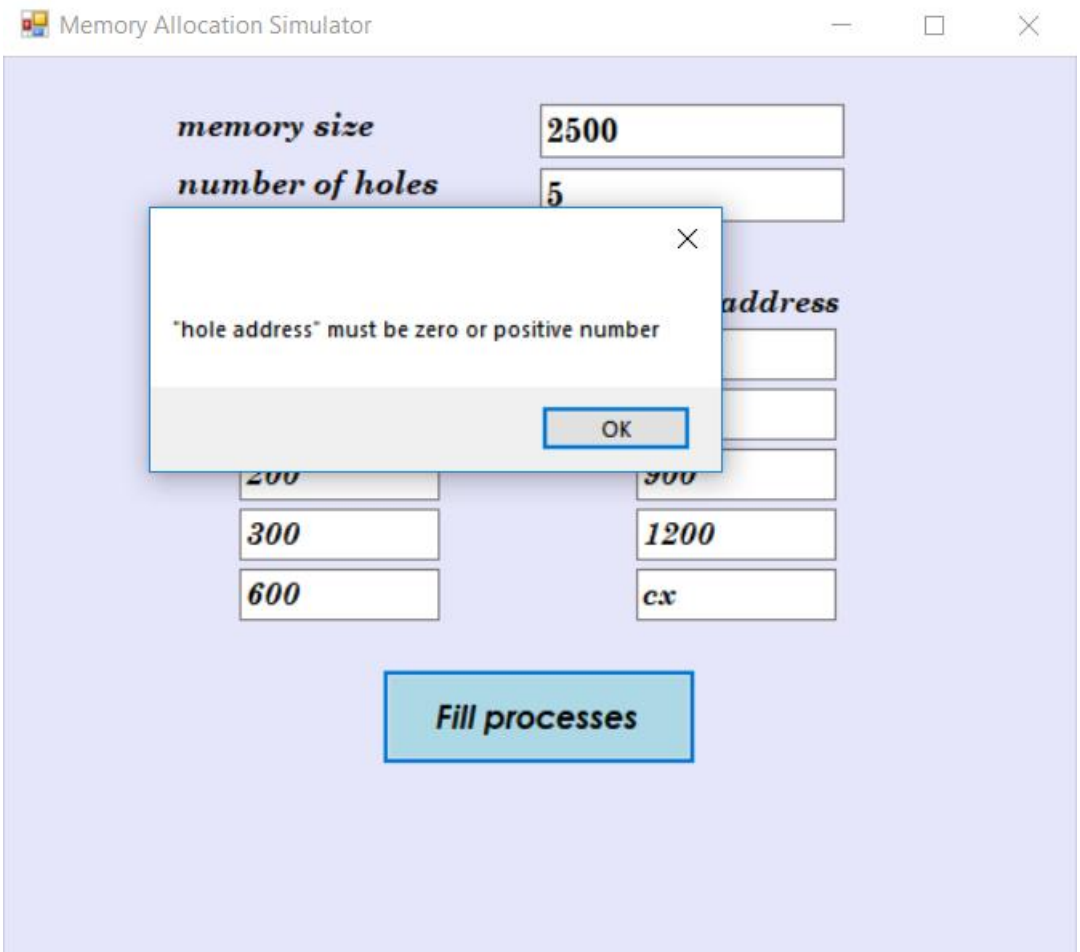
2. After writing (n) the number of holes n lines of textboxes will appear to fill holes information. "hole size and hole starting address".
After filling required information you can click fill processes to enter your processes info and start simulation.



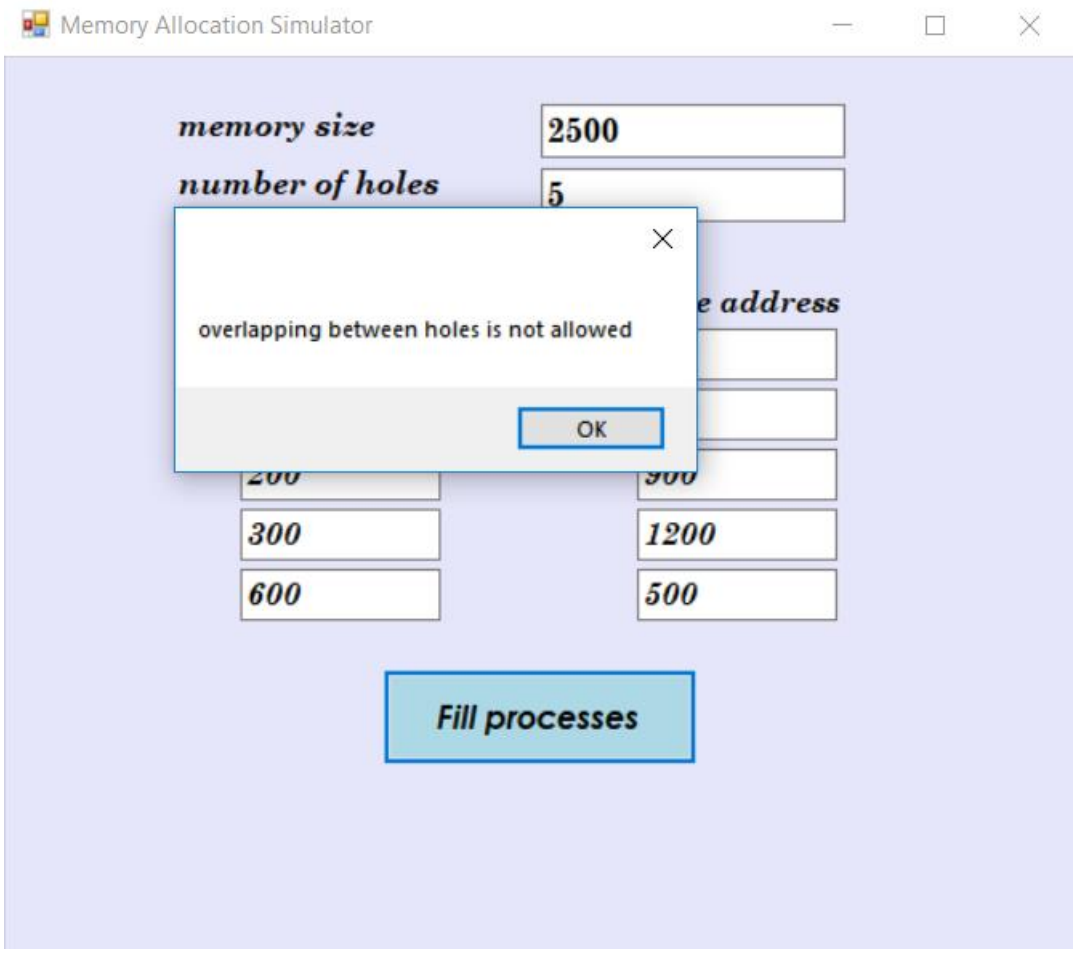
All fields should be filled; otherwise an error message will appear.



All sizes should be positive integers greater than 0 and. addresses should be positive integers; otherwise an error message will appear.

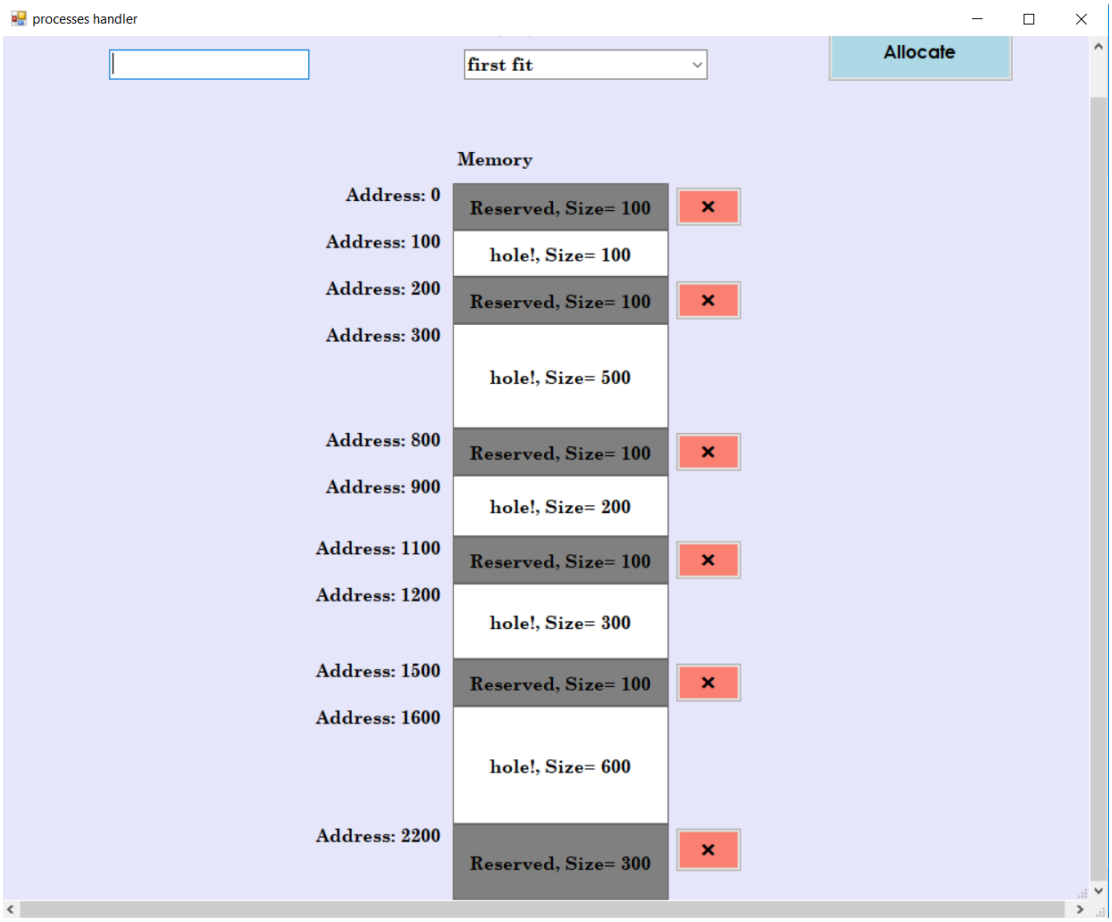


Holes sizes and addresses should not overlap; otherwise an error message will appear.



3. After clicking on "Fill processes" button another form will appear has the picture of memory holes on it.

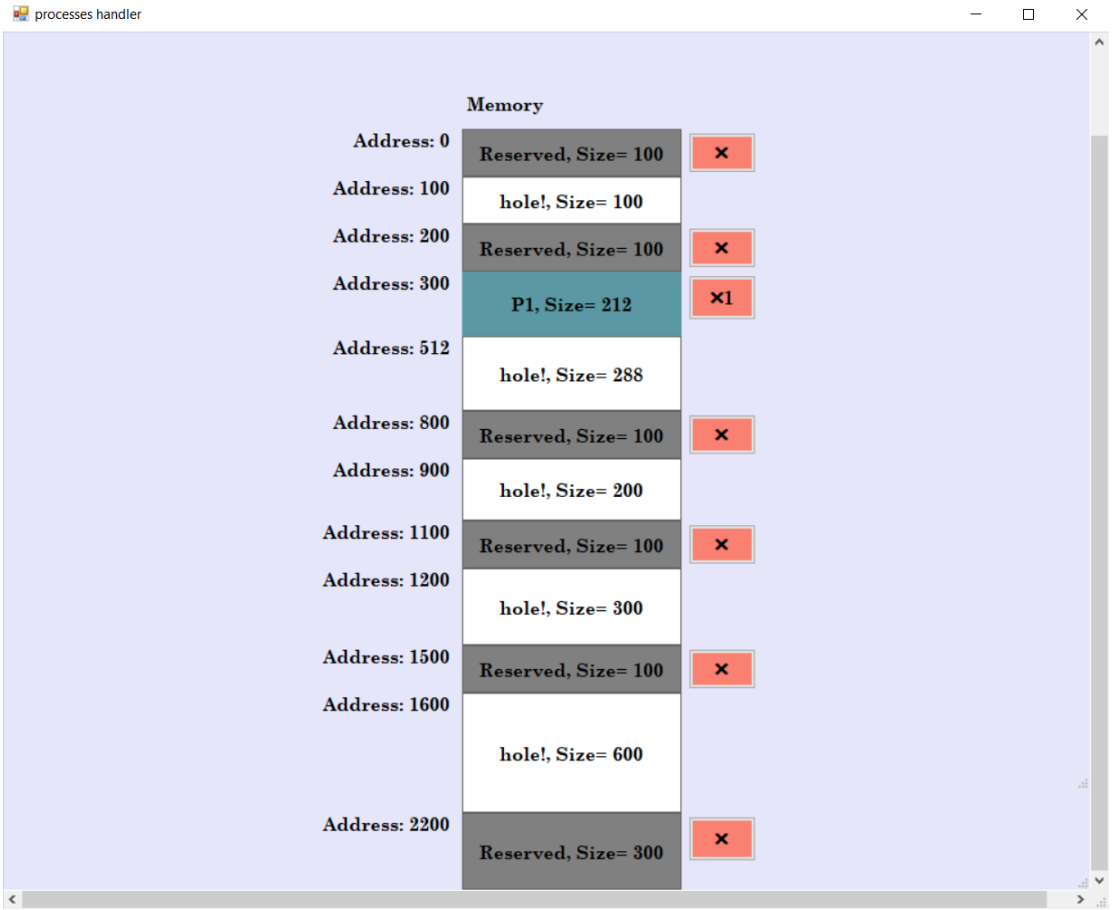
Other locations will be simulated as reserved with the option to deAllocate any of them.



4. Enter positive integer number for the process size. And choose method or algorithm -"first fit" or "best fit"- then press "Allocate" button.

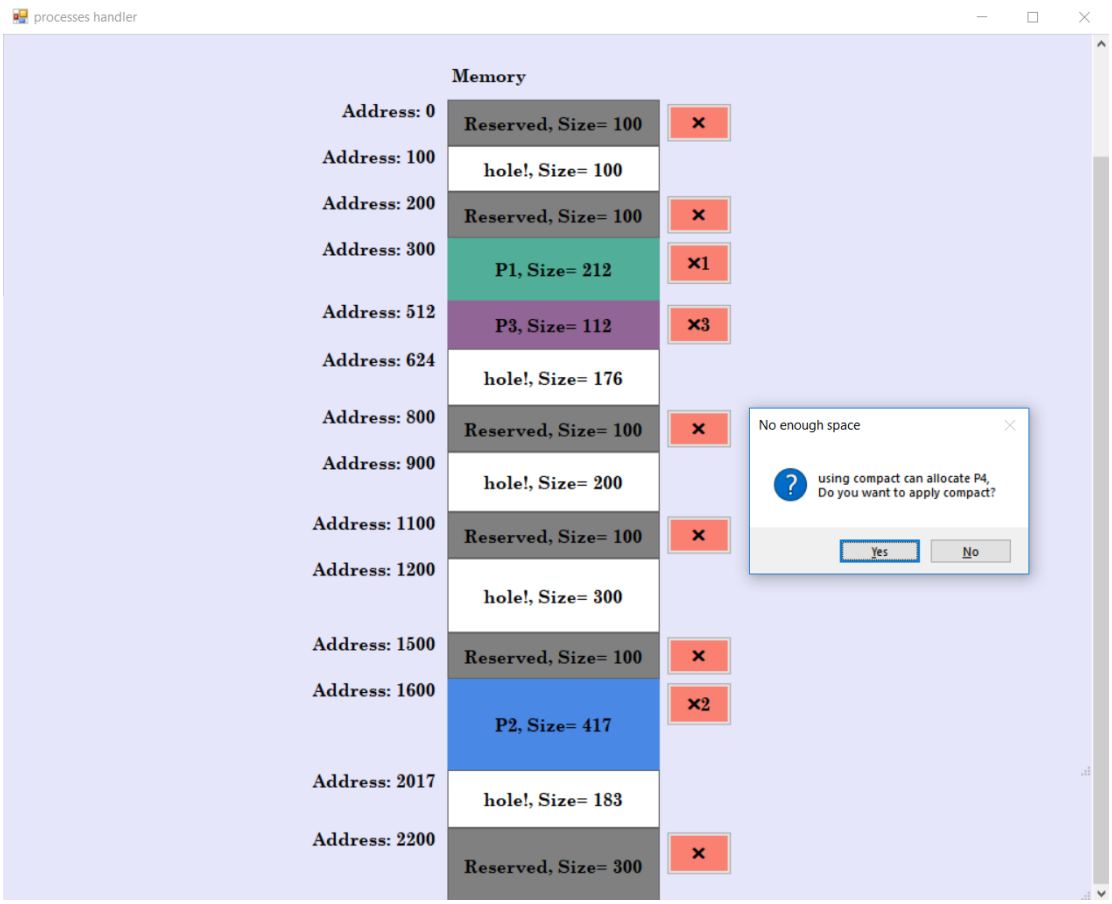
If you don’t choose the method or typed any other word it'll be "first fit" by default.

To deAllocate any process just click on the button next to it.



this screen after allocating a process of size 212.

5. If no hole to fit the size of the process but the sum of holes will fit the process. A message will appear allowing you to choose compact or no.



If you clicked "yes" compaction would be applied to merge all holes at the end of memory and the process will be allocated.

Note: merge between reserved sections if nothing between them is allowed as we don’t have information about them.

If you clicked "No" or the sum of holes is less than size of process. The process would be added to a waiting queue waiting deAllocation of the other processes.