



Ain Shams University
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The Memory Assignment

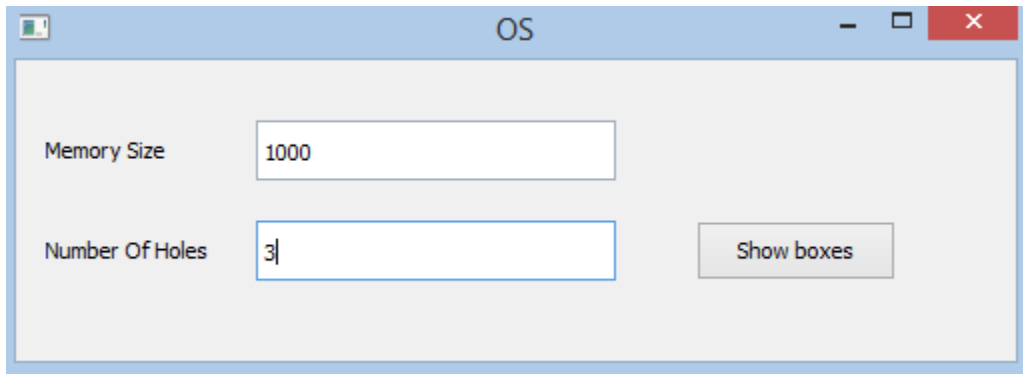
Names:

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Sec: 2

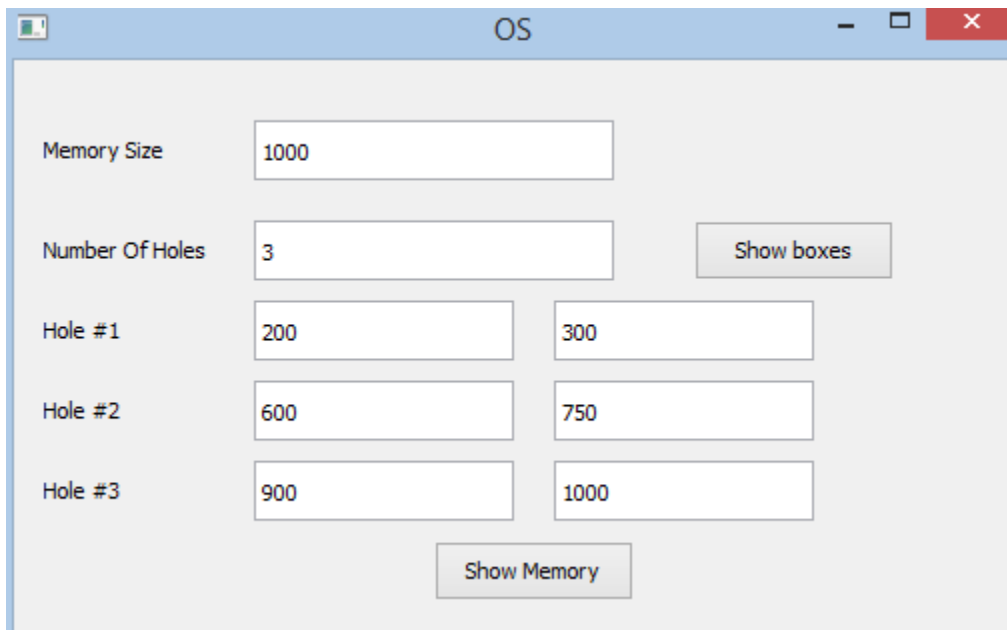
1-First, the user should input the size of memory and number of holes and then press (Show boxes) button.



The screenshot shows a window titled "OS" with a light blue border. Inside, there are two input fields: "Memory Size" with the value "1000" and "Number Of Holes" with the value "3". A button labeled "Show boxes" is positioned to the right of the "Number Of Holes" field.

Memory Size	1000
Number Of Holes	3
<button>Show boxes</button>	

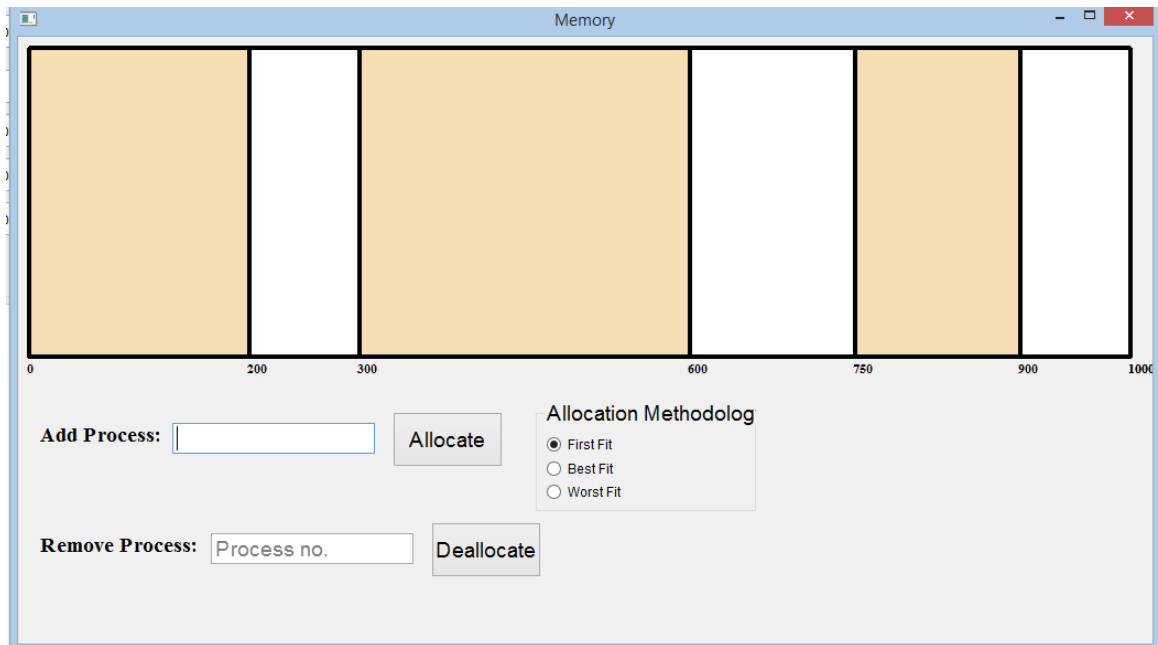
2-Second, the user should type the starting address and the ending address of each hole.



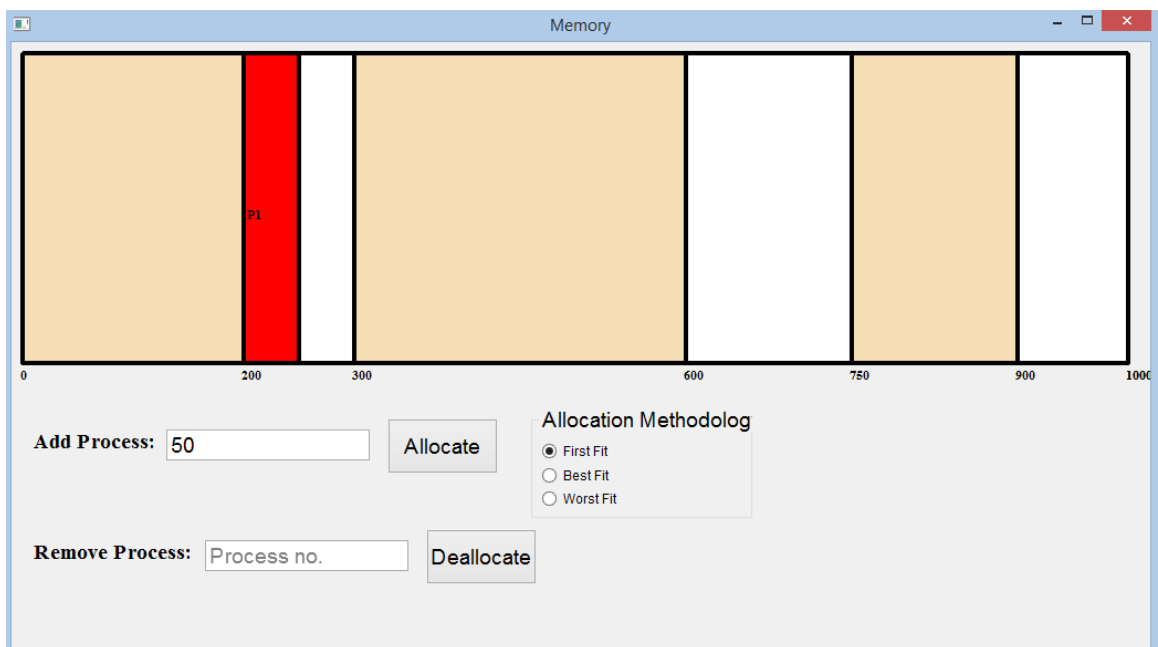
The screenshot shows the same "OS" window, but now with additional input fields for the starting and ending addresses of three holes. The "Memory Size" is still "1000" and "Number Of Holes" is still "3". The "Show boxes" button is still present. Below these, there are three rows of input fields for "Hole #1", "Hole #2", and "Hole #3". Each row has two fields: one for the starting address and one for the ending address. The values entered are: Hole #1 (200, 300), Hole #2 (600, 750), and Hole #3 (900, 1000). A button labeled "Show Memory" is located at the bottom center of the window.

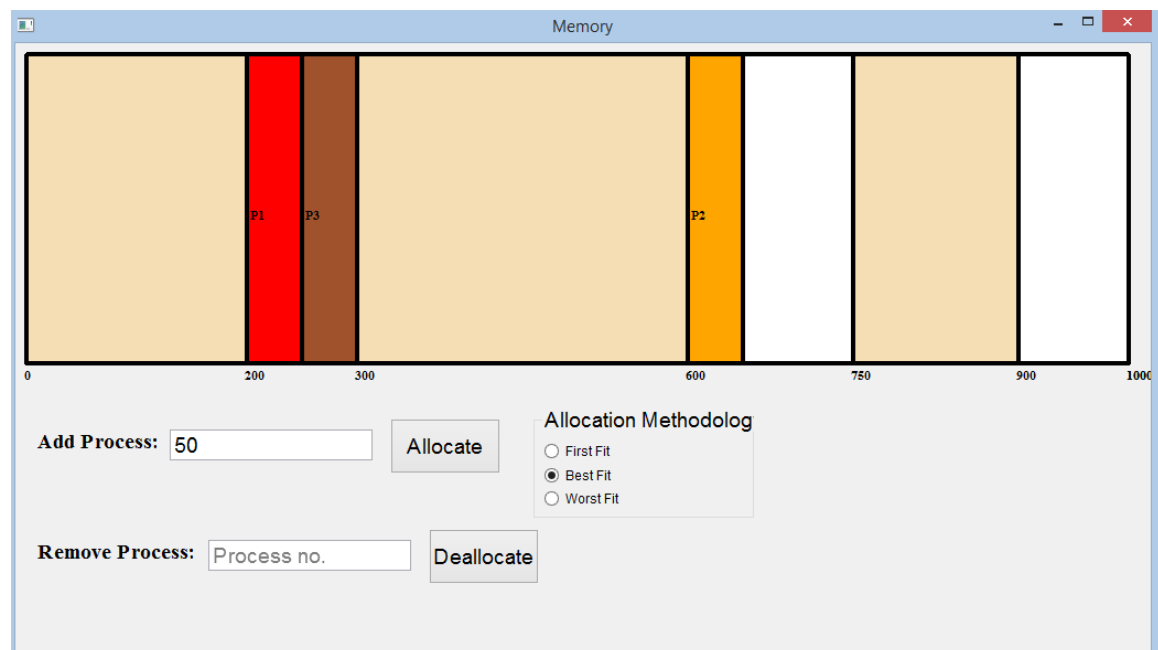
Memory Size	1000	
Number Of Holes	3	
<button>Show boxes</button>		
Hole #1	200	300
Hole #2	600	750
Hole #3	900	1000
<button>Show Memory</button>		

3-Clicking on (Show Memory) button generates a window containing our memory.

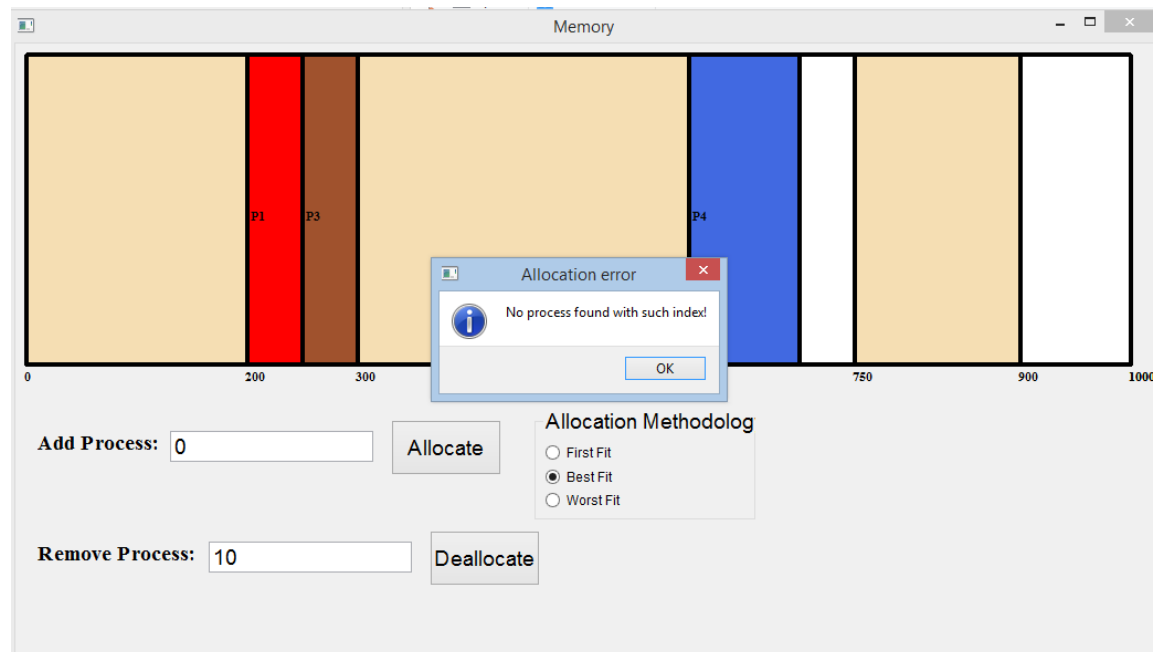
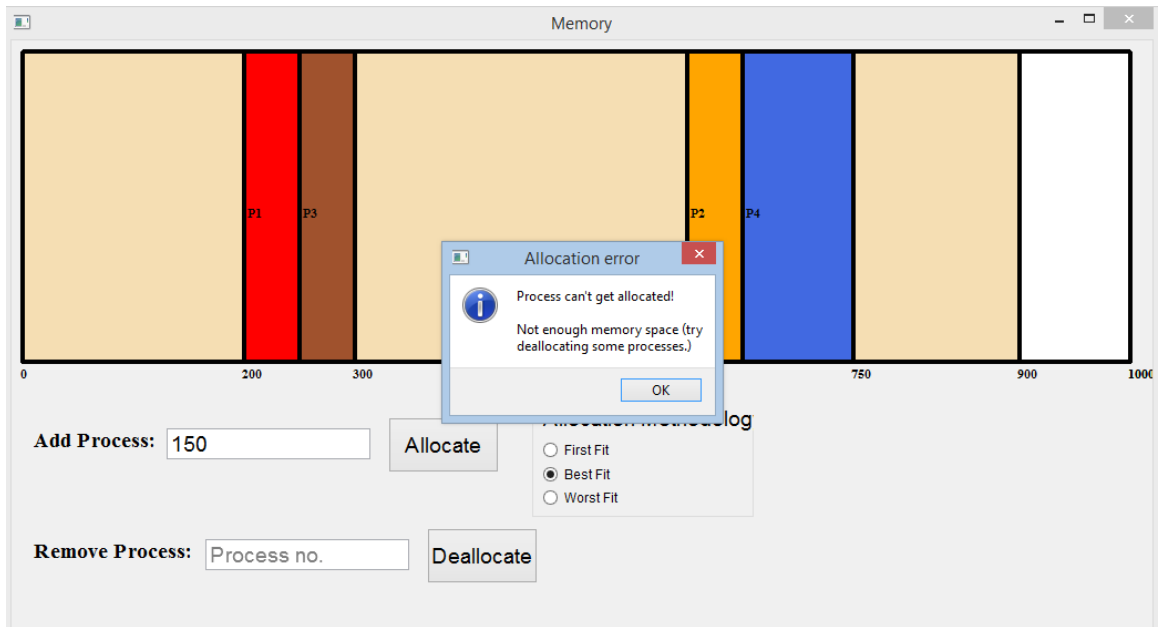


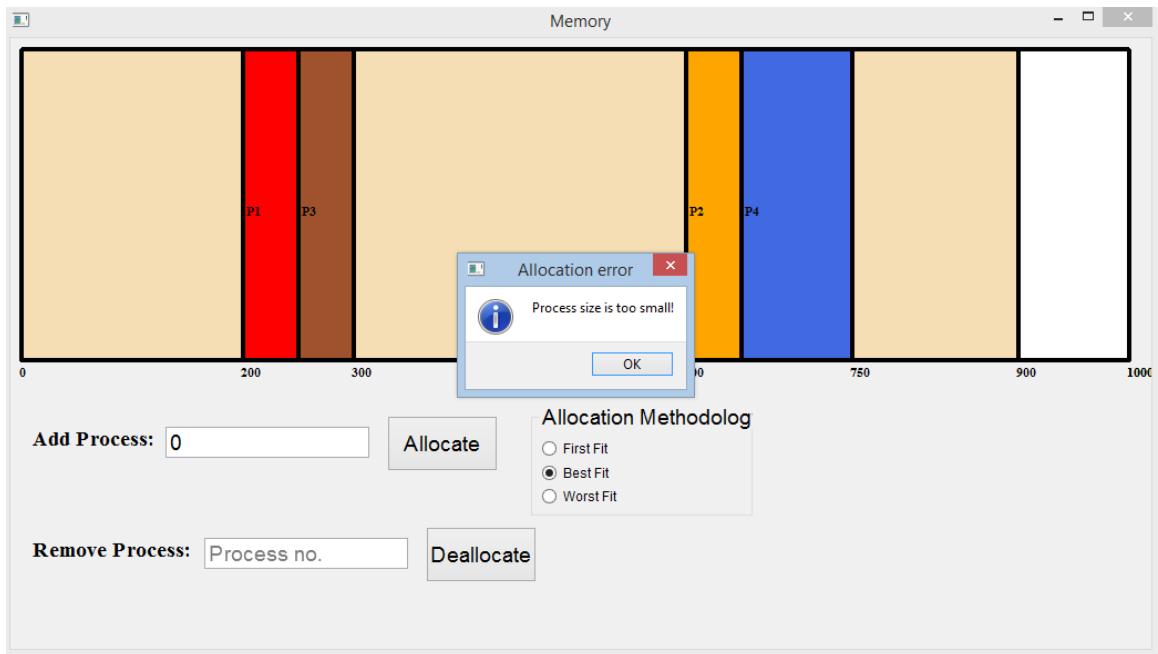
Different allocation techniques:





Error handling:





Deallocation:



Features:

1-When a process gets deallocated, if a hole is subjected to have more than one available space, processes of that hole get shifted so that the hole has one space only.

2-Error handling of some incorrect input data as shown in the screenshots.