Memory map of 2D array of characters –

Suppose we declare array of strings char names[5][10] with data “manas”,”om”,…… then this array will require 50 bytes (5 x 10) though every name doesn’t require 10 bytes. Here the remaining bytes go waste. For eg in name “om”, it should require 3 bytes only (including \0) but required 10 bytes. These remaining 7 bytes will go waste.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| m | a | n | a | s | \0 |  |  |  |  |
| o | m | \0 |  |  |  |  |  |  |  |
| n | i | h | a | r | \0 |  |  |  |  |
| a | b | h | i | r | a | m | \0 |  |  |
| a | j | a | y | \0 |  |  |  |  |  |

Memory adr 600 bytes at the end

610 are wasted

620

630

640