

Data Structures and Algorithms [19ECSC201]

III Semester

C Division

MAT Challenge

Code the Malloc Allocation Table as described below.

Deadline: 1st September 2019, Sunday, 9.00pm

Submission Mode: Submit your 'mat-roll-no.c' file via email to prakash.hegade@kletech.ac.in with the subject line: MAT Submission

The challenge is to design and implement a Malloc Allocation Table (MAT). First, using malloc() request and obtain 100MB of memory. Malloc returns you the starting address. The task is to use this 100MB as your heap and simulate the mentioned operations.

On this 100MB, support the following operations:

- my_malloc(): user can request for a memory chunk.
- my_free(): user can free the requested data. Memory is added back to the heap pool
- view_mat(): view the MAT table

MAT maintains all the allocations. It maintains the free and the used addresses. All unsaid and unexplained conditions to be obviously handled.

Evaluation Rubrics:

Si. No.	Parameter	Marks
1	Design of MAT	20
2	Implementation and Correctness	60
3	Code etiquettes	20
Total		100

MAT Challenge

The marks obtained in the challenge will be scaled down to 10 and considered for lab evaluations. (Lab Slot Number 03)

**** May The Force Be With You ****