

## Data Structures and Algorithms [19ECSC201]

III Semester

C Division

### MAT Challenge

Code the Malloc Allocation Table as described below.

**Deadline:** 1<sup>st</sup> September 2019, Sunday, ~~9.00pm~~ **2.00am**

**Submission Mode:** Submit your 'mat-roll-no.c' file via email to [prakash.hegade@kletech.ac.in](mailto: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 memory block.
- 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 04)

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