***NOTE:***

Explicitly state the assumptions you are making, if any.

*Add the scripts to a public git repo (github, gitlab, bitbucket) and email the repo URLs. The Name format should be: Your name + Date (DD-MM-YY)*

**Assignment 1:-**  
  
Implement a cache that on start-up would load data from a file into the cache. The cache would have an initial size of 20 elements and upon reaching its limit, to add any new element it would remove the least recently accessed element. On shutdown it should store the cached data back to the file. The data should be stored in the cache according to a caching strategy. Provide options for cache CRUD.

Testing Dataset : records of students. You need to create the test dataset. The student record would have data such as - their ID's, classes enrolled and marks obtained in them. The records should be cached in a sorted manner according to the student marks.

Document your choice of data structure and implementation​ strategy. Also the necessary steps to get it running with the test data set.

*Explicitly state the assumptions you are making, if any.*

*Add the scripts to a public git repo (github, gitlab, bitbucket) and email the repo URLs*

**Assignment 2:-**

Write a chat API that should be able to provide capabilities to chat between individuals or groups.   
  
Create a user interface that would use the API to allow users to communicate with others via one on one or group mode in real-time.  
  
Document your solution and the steps to get it working.