Problem Statement:

In-Memory Cache:

Description:

Babbar Bhaiya got a new client for his web-services company. Clients wants to have a efficiently designed In-Memory Cache system, which he/she can invoke with the driver class. Help babbar bhaiya to deliver this task.

Requirements:

- create a user-defined size cache and with Eviction policy as "LRU"
- support fetch/Insert/Delete/Clear functionality in the system.

Other Details:

Do not use any database or NoSQL store, use in-memory store for now.

Do not create any UI for the application.

Write a driver class for demo purposes. Which will execute all the commands at one place in the code and test cases.

Please prioritize code compilation, execution and completion.

Please do not access the internet for anything EXCEPT syntax.

You are free to use the language of your choice.

All work should be your own. If found otherwise, you may be disqualified.

Expectations:

Code should be demo-able (very important)

Complete coding within the duration of 90 minutes.

Code should be modular, with Object Oriented design.

Maintain good separation of concerns.

Code should be extensible. It should be easy to add/remove functionality without rewriting the entire codebase.

Code should handle edge cases properly and fail gracefully.

Code should be readable.

Follow good coding practices: Use intuitive variable names, function names, class names etc. Indent code properly. Once the code is complete please zip the source code and upload it to: xxxyyyzzz.com