Interview Assignment(SDE1/2):

Implement a key-value pair(In-memory) ,which would have below API

- PUT (key, value, ttl) : if key exits in the system them update the value with the new value and with new ttl(time to live in seconds) .
- Get (Key) : Give the value of corresponding key if the key exists in the system and the key-value pair is not expired .
  Note : A key-value pair will be expired if it will reach its ttl value . Also Note that the size of the key-value pair won't be able to allocate more than N(~10^5) key-value pairs. in-case if there will be request to put new key-value pairs which could increase the number of key-value pairs to its maximum size , then use LRU algorithm to remove key-value pair to accommodate new request .

  Note: Here ttl value and N is not exact number . one can expect some error margin if you need to remove the key-value on delayed basis example : garbage collector .