```
import logging
import threading
#this is for python 3.0
from threading impor
import time

d={} #'d' is the dic

#for create operatio
#use syntax "create(

def create(key,value
    if key in d:
        print("error
    else:
        if(key.isalp
            if len(d
                if t

                else

                if l

        else:
            print("error: Memory limit exceeded!! ")#error message2
        else:
            print("error: Invalind key_name!! key_name must contain only alphabets and no


    #for read operation
    #use syntax "read(key_name)"

    def read(key):
        if key not in d:
            print("error: given key does not exist in database.") #error message4
        else:
            b=d[key]
            if b[1]!=0:
                if time.time()<b[1]: #comparing the present time with expiry time
                    stri=str(key)+":"+str(b[0]) #to return the value in the format of JasonObj
                    return stri
                else:
                    print("error: time-to-live of",key,"has expired") #error message5
            else:
                stri=str(key)+":"+str(b[0])
                return stri


    #for delete operation
    #use syntax "delete(key_name)"

    def delete(key):
        if key not in d:
            print("error: given key does not exist in database. ") #error message4
        else:
            b=d[key]
```

colab-jupyter.log ✕

1 to 10 of 38 entries | Filter |

Timestamp	Level	Messages
Jan 1, 2021, 2:02:55 AM	WARNING	WARNING:root:kernel 41c60ac0-341c-4340-8047-ce4ca6a9abf4 restarted
Jan 1, 2021, 2:02:55 AM	INFO	KernelRestarter: restarting kernel (1/5), keep random ports
Jan 1, 2021, 1:58:19 AM	WARNING	WARNING:root:kernel 41c60ac0-341c-4340-8047-ce4ca6a9abf4 restarted
Jan 1, 2021, 1:58:19 AM	INFO	KernelRestarter: restarting kernel (1/5), keep random ports
Jan 1, 2021, 1:56:13 AM	WARNING	WARNING:root:kernel 41c60ac0-341c-4340-8047-ce4ca6a9abf4 restarted
Jan 1, 2021, 1:56:13 AM	INFO	KernelRestarter: restarting kernel (1/5), keep random ports
Jan 1, 2021, 1:54:40 AM	WARNING	WARNING:root:kernel 41c60ac0-341c-4340-8047-ce4ca6a9abf4 restarted
Jan 1, 2021, 1:54:40 AM	INFO	KernelRestarter: restarting kernel (1/5), keep random ports
Jan 1, 2021, 1:53:43 AM	WARNING	WARNING:root:kernel 41c60ac0-341c-4340-8047-ce4ca6a9abf4 restarted
Jan 1, 2021, 1:53:43 AM	INFO	KernelRestarter: restarting kernel (1/5), keep random ports

Show 10 ✔ per page | **1** 2 3 4

```python
        del d[key]
        if b[1]!=0:
            if time.time()<b[1]: #comparing the current time with expiry time
                del d[key]
                print("key is successfully deleted")
            else:
                print("error: time-to-live of",key,"has expired") #error message5
        else:
            del d[key]
            print("key is successfully deleted")




print("enter any key")
n=int(input())
if(n==1):
  print("enter key")
  key=input()
  value=int(input())
  create(key,value)
if(n==2):
  print("enter key to read")
  def checkKey(d, key):
      if d.has_key(key): #has_keys() method has been removed from Python3 version. Therefo
        print("Present, value =", d[key] )
      else:
        print("Not present")
  checkKey(d, key)
  read(key)
if(n==3):
  print("enter key")
  key=input()
  read(key)
if(n<1 or n>3):
  print("enter valid number")
exit()


#we can access these using multiple threads like
t1=Thread(target=(create),args=(1,)) #as per the operation
t1.start()
time.sleep(1)
t2=Thread(target=(read),args=(1,)) #as per the operation
t2.start()
time.sleep(1)
t3=Thread(target=(delete),args=(1,))
t3.start()
time.sleep(1)
#and so on upto tn
print(d)
#the code also returns other errors like
#"invalidkey" if key_length is greater than 32 or key_name contains any numeric,special ch
#"key doesnot exist" if key_name was mis-spelt or deleted earlier
#"File memory limit reached" if file memory exceeds 1GB

v=input("If you want it to master database Say ves or no")
```

```
  if(y=='yes'):
    data={}
    import json
    with open('master.json','r') as fp:
      data = json.load(fp)
    master=dict(data)
    master.update(d)
    with open('master.json','w') as fp:
      json.dump(master,fp)

  print("Done!! Thank you!")
```

```
    enter any key
    1
    enter key
    aishu
    55
    Exception in
    Traceback (mo
      File "/usr,
        self.run(
      File "/usr,
        self._tan
    TypeError: cr

    error: given
    error: given
    {'aishu': [5!
    If you want :
    Done!! Thank
```

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