

Results of a few functional scenarios:

```
In [1]: import CRD as c #importing the modularized CRD.py
```

```
In [2]: c.create('12','52') #Create with invalid key, error
```

Error: Invalid key. Characters in the key should only be alphabets.

```
In [3]: c.create('Age','xyz') #Create with invalid value error
```

Error: value 'xyz', is not a valid JSON object.

```
In [4]: c.create('abcdefghijklmnopqrstuvwxyzabcdefg','33') #create with #char error
```

Error: Length of key must be less than or equal to 32.

```
In [8]: #c create with key,value given (no error)
```

```
c.create('Age','25')
c.create('Movie',{'actors':{'actor':[{"id":"1","firstName":"Tom","lastName":"Cruise"}]}}')
c.create('People',{'emp_name':"Noviya","emp_no.":["noviya2000@gmail.com"]})
c.show()
```

```
{'Age': ['25', 0], 'Movie': [{'actors':{'actor':[{"id":"1","firstName":"Tom","lastName":"Cruise"}]}}', 0], 'People': [{'emp_n
ame':"Noviya","emp_no.":["noviya2000@gmail.com"]}', 0]}
```

```
In [9]: c.create('Age','26') #check if already exists
```

Error: key 'Age', already exists.

```
In [10]: c.read('People') #read by providing the key
```

```
Out[10]: 'People:{"emp_name":"Noviya","emp_no.":["noviya2000@gmail.com"]}'
```

```
In [11]: c.read('Age') #read by providing the key
```

```
Out[11]: 'Age:25'
```

```
In [12]: c.read('xyz') #read, but not found in database
```

Error: key 'xyz', is not found in the database.

```
In [18]: c.delete('Movie') #delete by providing the key  
c.show() #displaying the datas
```

key 'Movie' deleted successfully.

```
{'Age': ['25', 0], 'People': ['{"emp_name":"Noviya","emp_no.":["noviya2000@gmail.com"]}', 0]}
```

```
In [25]: c.create('Types','50',60) #create with key,value given and with time-to-live property value given(number of seconds)
c.show()

{'Age': ['25', 0], 'People': ['{"emp_name":"Noviya","emp_no.":["noviya2000@gmail.com"]}', 0], 'Types': ['50', 1606849604.1571605]}
```

```
In [27]: c.read('Types')#read within time-to-live property value-1 min(60s)
```

```
Out[27]: 'Types:50'
```

```
In [28]: c.read('Types')#read after time-to-live property value
```

```
Error: Time-To-Live for 'Types', has expired.
```

```
In [29]: c.delete('Types') #delete after time-to-live property value
```

```
Error: Time-To-Live for 'Types', has expired.
```

```
In [ ]: #CRD Library throws error if size of the file storing data exceeds 1GB.
        #And it is thread-safe by locking mechanisms to synchronize threads.
```