Write caching layer along with Junit test cases for standalone java application with following assumptions:

* Cache should be globally accessible throughout the JVM
* Cache client will access cached objects by providing table name & primary key value
* All tables have integer primary key
* Initially three tables are required to be cached, REF\_COUNTRY, REF\_CURRENCY & REF\_HOLIDAY
* Cache should have provision to support more tables if required
* Cache should have provision to manual and auto removal of cache
* Code should be adhered to java development standards
* Concurrent access should be enabled using Read/Write Locks

Note:

1. **Code should be written using JDK only (don’t use any readymade APIs or Framework)**
2. **You are not required to write complete DAO layer for the tables (instead you can return dummy data from DAO methods to pass the JUnit test cases)**
3. **Provided solution should not have any specific dependencies and should be runnable on any Java enabled machine.**
4. **Test Cases and Client code is expected to test the cache implementation.**

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|  |  |  |  |  |
|  | **REF\_COUNTRY** |  | |  |
|  | **Column Name** | **Pk** | **Data Type** |  |
|  | COUNTRY\_ID | 1 | NUMBER (9) |  |
|  | COUNTRY\_CD |  | VARCHAR2 (20 Byte) |  |
|  | COUNTRY\_NAME |  | VARCHAR2 (50 Byte) |  |
|  | STATUS\_IND |  | NUMBER (3) |  |
|  | LAST\_MODIFY\_DT |  | DATE |  |
|  | MODIFY\_PERSON\_NUM |  | NUMBER (9) |  |
|  |  |  |  |  |
|  | **REF\_CURRENCY** |  | |  |
|  | **Column Name** | **Pk** | **Data Type** |  |
|  | CURR\_ID | 1 | NUMBER (9) |  |
|  | CURR\_CD |  | VARCHAR2 (3 Byte) |  |
|  | CURR\_NAME |  | VARCHAR2 (50 Byte) |  |
|  | CURRENCY\_SYMBOL |  | VARCHAR2 (5 Byte) |  |
|  | STATUS\_IND |  | NUMBER (3) |  |
|  | LAST\_MODIFY\_DT |  | DATE |  |
|  | MODIFY\_PERSON\_NUM |  | NUMBER (9) |  |
|  |  |  |  |  |
|  | **REF\_HOLIDAY** |  | |  |
|  | **Column Name** | **Pk** | **Data Type** |  |
|  | HOLIDAY\_ID | 1 | NUMBER (9) |  |
|  | HOLIDAY\_CD |  | VARCHAR2 (30 Byte) |  |
|  | HOLIDAY\_NAME |  | VARCHAR2 (50 Byte) |  |
|  | HOLIDAY\_DT |  | DATE |  |
|  | STATUS\_IND |  | NUMBER (3) |  |
|  | LAST\_MODIFY\_DT |  | DATE |  |
|  | MODIFY\_PERSON\_NUM |  | NUMBER (9) |  |