**T1 – 0**

db.adminCommand({

setDefaultRWConcern: 1,

defaultReadConcern: { level : "majority" },

defaultWriteConcern: { w: "majority", wtimeout : 8000 }

})

{

defaultReadConcern: { level: 'majority' },

defaultWriteConcern: { w: 'majority', wtimeout: 8000 },

updateOpTime: Timestamp({ t: 1688824105, i: 1 }),

updateWallClockTime: 2023-07-08T13:48:25.704Z,

defaultWriteConcernSource: 'global',

defaultReadConcernSource: 'global',

localUpdateWallClockTime: 2023-07-08T13:48:25.704Z,

ok: 1,

'$clusterTime': {

clusterTime: Timestamp({ t: 1688824105, i: 2 }),

signature: {

hash: Binary(Buffer.from("0000000000000000000000000000000000000000", "hex"), 0),

keyId: Long("0")

}

},

operationTime: Timestamp({ t: 1688824105, i: 2 })

}

**T1-00**

mm = db.getMongo()

ss = mm.startSession({readConcern: 'majority', writeConcern: 'majority'})

ss.startTransaction({readConcern: 'majority', writeConcern: 'majority'})

collection = ss.getDatabase("db\_bank").getCollection("bank")

**T2-00**

mm = db.getMongo()

ss = mm.startSession({readConcern: 'majority', writeConcern: 'majority'})

ss.startTransaction({readConcern: 'majority', writeConcern: 'majority'})

collection = ss.getDatabase("db\_bank").getCollection("bank")

**T1-01**

collection.findOne({'\_id': ObjectId('64a5ccd605967ed9e5813d1f')})

{

\_id: ObjectId("64a5ccd605967ed9e5813d1f"),

id: 15,

name: 'Caterina',

surname: 'Moretti',

date\_of\_birth: '23/5/1990',

bank: 'UBI Banca',

balance: 12882

}

**T1-02**

collection.updateOne({'\_id': ObjectId('64a5ccd605967ed9e5813d1f')}, {'$inc': {'balance': -100}})

{

acknowledged: true,

insertedId: null,

matchedCount: 1,

modifiedCount: 1,

upsertedCount: 0

}

**T2-03**

collection.findOne({'\_id': ObjectId('64a5ccd605967ed9e5813d1f')})

{

\_id: ObjectId("64a5ccd605967ed9e5813d1f"),

id: 15,

name: 'Caterina',

surname: 'Moretti',

date\_of\_birth: '23/5/1990',

bank: 'UBI Banca',

balance: 12882

}

**T1-04**

ss.commitTransaction()

{

ok: 1,

'$clusterTime': {

clusterTime: Timestamp({ t: 1688814500, i: 7 }),

signature: {

hash: Binary(Buffer.from("0000000000000000000000000000000000000000", "hex"), 0),

keyId: 0

}

},

operationTime: Timestamp({ t: 1688814500, i: 7 }),

recoveryToken: { recoveryShardId: 'rs-shard-02' }

}

**T2-05**

collection.updateOne({'\_id': ObjectId('64a5ccd605967ed9e5813d1f')}, {'$inc': {'balance': -100}})

[**MongoServerError:**](file:///C:\Users\ANDREA\AppData\Local\MongoDBCompass\app-1.37.0\resources\app.asar\build\index.html) Encountered error from shard02-a:27017 during a transaction :: caused by :: WriteConflict error: this operation conflicted with another operation. Please retry your operation or multi-document transaction.