

# Test result of Project1-Unit3

## Test case 1 (T1: set option choice, T2: read option choice)

I put a sleep 10s operation in the autoMobile set option:  
`autoMobile.setOptionChoice(optionSetName, optionName);`

First I use t1 to modify the Option Choice. Then I use t2 to read it. In this case, because set option will sleep 10s, then t2 will wait 10s to get the value.

Because I want to let t2 to do the get option after t1, so I just put a 1s sleep in the T2 when it begin to run.

The console output is:

```
-----  
Read files:testFile1 :  
-----  
Thread T1 began to run.  
Thread T2 began to run.  
Try to select Color Option to be 'Fort Knox Gold Clearcoat Metallic'  
Enter setOptionChoice  
System time: 1392360124626  
T2 sleep 1s over, try to access "getOptionChoice".  
Still waiting.....  
Set operation sleep over(after 10s)!  
Enter getOptionChoice  
T2, get operation choice:Fort Knox Gold Clearcoat Metallic  
System time: 1392360134627  
Time passed: 10s
```

## Test case 2(T3: set option choice, T4: set option choice)

In this test, I let T3 and T4 both modify the same property in the same Automobile class. There is not data corruption in this case.

## Experiment 1

First time, T3 and T4 can get different result. That is because after T3 unlock the Object of Automobile, T3 get options get the lock first, so T3 get will display “Fort Knox Gold Clearcoat Metallic”.

The option sequence is :

T3 set → T3 get → T4 set → T4 get.

Test case 2:

```
-----  
Read files:testFile1 :  
-----  
Thread T3 began to run.  
Try to select [Color] Option to be 'Fort Knox Gold Clearcoat Metallic'  
Enter setOptionChoice  
Thread T4 began to run.  
Try to select [Color] Option to be 'CD Silver Clearcoat Metallic'  
Set operation sleep over(after 10s)!  
Enter getOptionChoice  
T3, get operation choice:Fort Knox Gold Clearcoat Metallic  
Enter setOptionChoice  
Set operation sleep over(after 10s)!  
Enter getOptionChoice  
T4, get operation choice:CD Silver Clearcoat Metallic
```

## Experiment 2

This time, T3 and T4 get the same result. Because the sequence is

T3 set → T4 set → T3 get → T4 get.

Note: the sequence is random.

Test case 2:

```
-----  
Read files:testFile1 :  
-----  
Thread T3 began to run.  
Thread T4 began to run.  
Try to select [Color] Option to be 'CD Silver Clearcoat Metallic'  
Enter setOptionChoice  
Try to select [Color] Option to be 'Fort Knox Gold Clearcoat Metallic'
```

Set operation sleep over(after 10s)!

Enter setOptionChoice

Set operation sleep over(after 10s)!

Enter getOptionChoice

T3, get operation choice:Fort Knox Gold Clearcoat Metallic

Enter getOptionChoice

T4, get operation choice:Fort Knox Gold Clearcoat Metallic