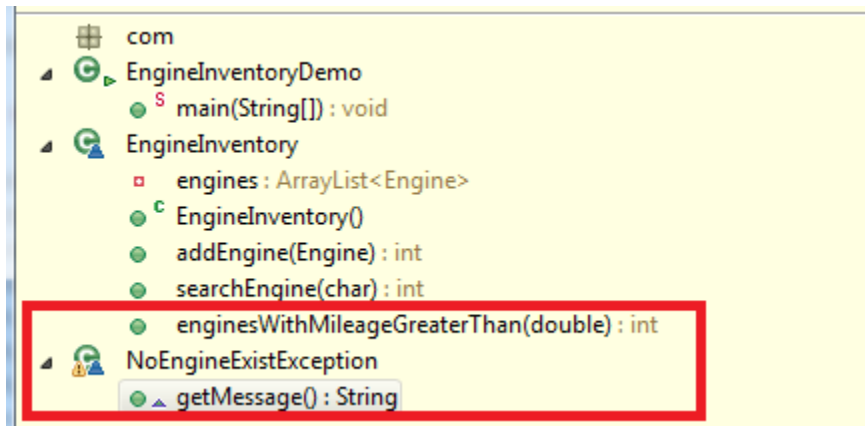


After Question 2 is completed, add one more method in EngineInventory class and one customized exception as per below outline:



enginesWithMileageGreaterThan – This method will take a mileage value as parameter. It will return the count of engines in the array list “engines” which has mileage greater than the input parameter. However, if there is no such engine where mileage is greater than input parameter, then the method will throw NoEngineExistsException object.

NoEngineExistsException – This class extends Exception and overrides getMessage() method by returning below String (case sensitive):

"No Engine Exists With Greater Mileage"

Try below code from main method and verify the output:

Input:

```
EngineInventory inv = new EngineInventory();

Engine e1 = new TwoStroke(1, 2200, 25, 'd');
Engine e2 = new FourStroke(2, 2400, 25, 'g');
Engine e3 = new TwoStroke(3, 2600, 25, 'd');
Engine e4 = new FourStroke(4, 2800, 25, 'd');
System.out.println(inv.addEngine(e1));
System.out.println(inv.addEngine(e2));
System.out.println(inv.addEngine(e3));
System.out.println(inv.addEngine(e4));
try {
    System.out.println(inv.enginesWithMileageGreaterThan(20));
} catch (NoEngineExistsException e) {
    // TODO Auto-generated catch block
    System.out.println(e.getMessage());
}
try {
    System.out.println(inv.enginesWithMileageGreaterThan(50));
} catch (NoEngineExistsException e) {
    // TODO Auto-generated catch block
    System.out.println(e.getMessage());
}
```

Output:

```
1
2
3
4
2
No Engine Exists With Greater Mileage
```

Once done, submit the solution files over iAscert.