

## MRF tyres(---RETIRED---)

**Grade settings:** Maximum grade: 100

**Disable external file upload, paste and drop external content:** Yes

**Based on:** [MRF tyres\(---RETIRED---\)](#)

**Run:** Yes **Evaluate:** Yes

**Automatic grade:** Yes

MRF tyres are a well-known Tyre company across the city. They wanted to find and count the Order Ids based on the Tyre type. The manager intimates a software developer to help in their process. You, being the software developer, develop a Java program based on the requirement.

### Component Specification: TyreMain Class

| Type (Class)    | Attributes                                 | Methods  |
|-----------------|--|--|
| <b>TyreMain</b> | private Map<String, String> <b>tyreMap</b> | Getter and setter methods for the attribute are included in the code skeleton. |

**Note:** Here the **tyreMap**, holds the Key as orderId and Value as tyreType.

### Requirement 1: Find the number of orderIds based on the given tyreType.

| Type (Class)    | Methods  | Responsibilities  |
|-----------------|--|---|
| <b>TyreMain</b> | public<br>int <b>findCountOfOrderIdsBasedOnTheTyreType</b> (String tyreType) | This method accepts tyreType as an argument. If the tyreType matches the tyreType present in the Map, it must count the orderIds and return the same. Else return -1.<br><br><i>Condition: tyreType is a case-insensitive</i> |

### Requirement 2: Filter the orderIds based on the tyreType.

| Type (Class) | Methods | Responsibilities |
|--------------|---------|------------------|
|--------------|---------|------------------|

|                 |   |  |
|-----------------|---|--|
| <b>TyreMain</b> | <pre>public List&lt;String&gt; <b>findOrderIdsBasedOnTheTyreType</b>(String tyreType)</pre> | <p>This method filters the orderIds and returns the list of order Ids that have the same tyreType.</p> <p><i>Condition: tyreType is a case-insensitive</i></p> |
|-----------------|---|--|

**You are provided with the main method as code template and it is excluded from evaluation.**

**Note:**

- In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user, and the rest of the text represents the output.
- Ensure to follow the object-oriented specifications provided in the question description.
- Ensure to provide the names for the classes, attributes, and methods as specified in the question description.
- Adhere to the code template, if provided.

**Sample Input/Output 1:**

Enter number of records to be added

**3**

Enter the records (Order Id: Tyre Type)

**ASHG8124:AllSeason**

**AJSH1626:Touring**

**JSHH1865:Stock**

Enter the Tyre type to be searched

**stock**

The Order Ids based on stock are 1

Enter the Tyre type to identify the Order Ids

**touring**

Order Ids based on the touring are

AJSH1626

**Sample Input/Output 2:**

Enter number of records to be added

**2**

Enter the records (Order Id: Tyre Type)

**SHJK1265:AllSeason**

**KSAH8172:Touring**

Enter the Tyre type to be searched

**stock**

No Order Ids were found for stock

Enter the Tyre type to identify the Order Ids

**touring**

Order Ids based on the touring are

KSAH8172

**Sample Input/Output 3:**

Enter number of records to be added

**2**

Enter the records (Order Id: Tyre Type)

**SHJK1265:AllSeason**

**KSAH8172:Touring**

Enter the Tyre type to be searched

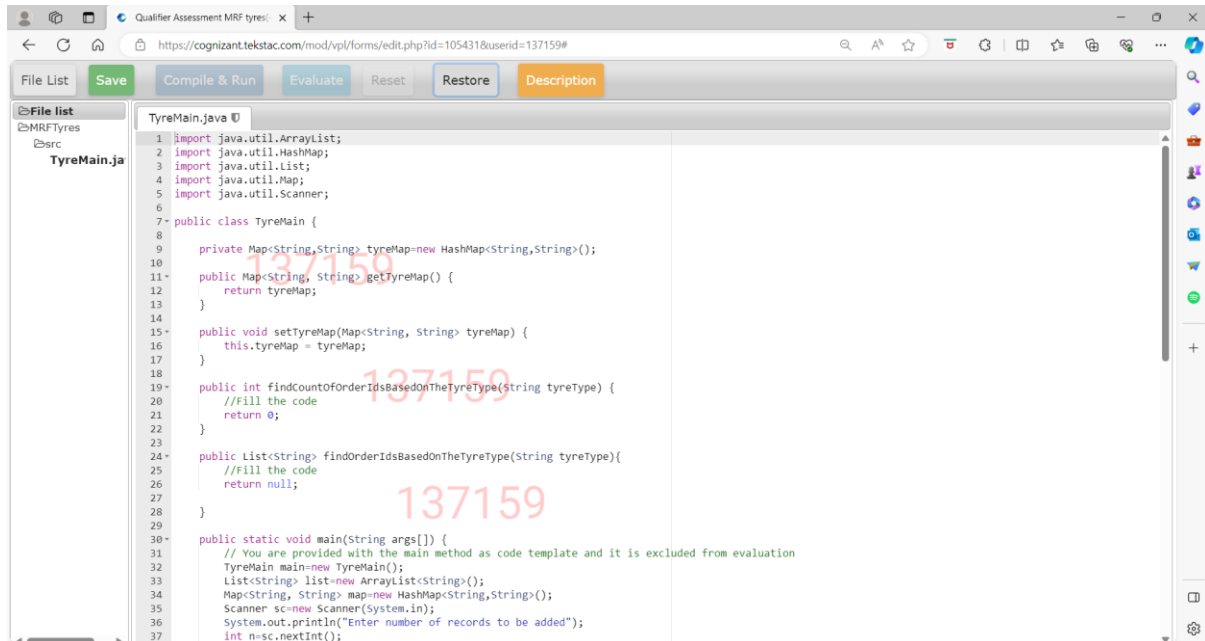
## touring

The Order Ids based on touring are 1

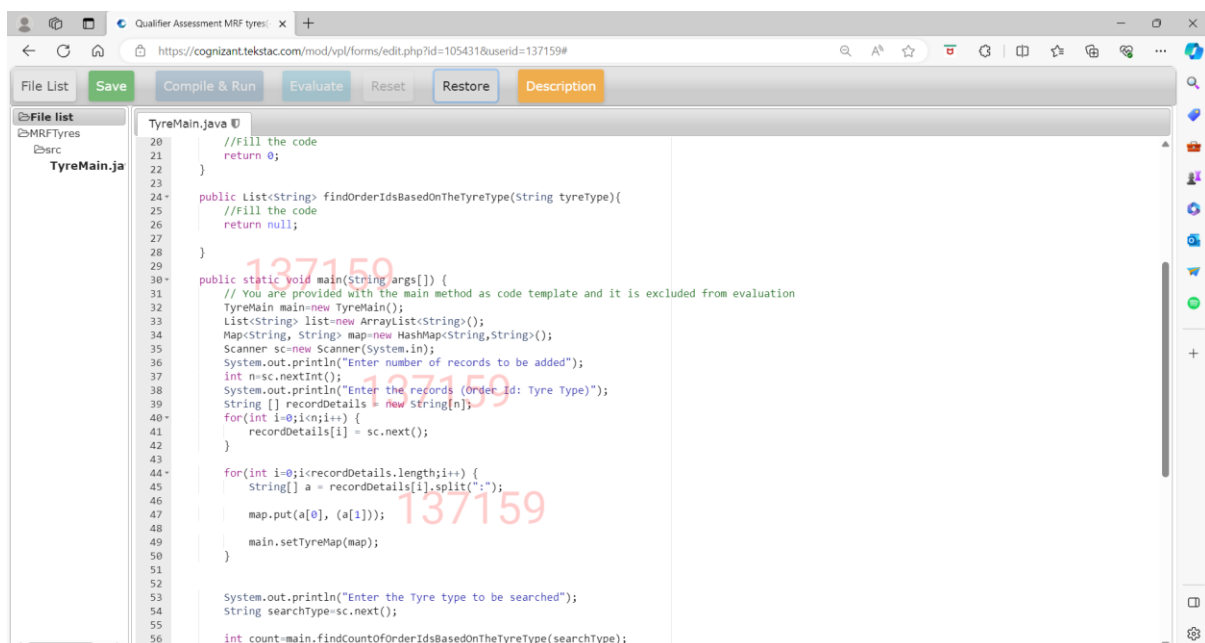
Enter the Tyre type to identify the Order Ids

## summer

No Order Ids were found for the summer



```
1 import java.util.ArrayList;
2 import java.util.HashMap;
3 import java.util.List;
4 import java.util.Map;
5 import java.util.Scanner;
6
7 public class TyreMain {
8
9     private Map<String,String> tyreMap=new HashMap<String,String>();
10
11     public Map<String, String> getTyreMap() {
12         return tyreMap;
13     }
14
15     public void setTyreMap(Map<String, String> tyreMap) {
16         this.tyreMap = tyreMap;
17     }
18
19     public int findCountOfOrderIdsBasedOnTheTyreType(String tyreType) {
20         //Fill the code
21         return 0;
22     }
23
24     public List<String> findOrderIdsBasedOnTheTyreType(String tyreType){
25         //Fill the code
26         return null;
27     }
28
29 }
30
31 public static void main(String args[]) {
32     // You are provided with the main method as code template and it is excluded from evaluation
33     TyreMain main=new TyreMain();
34     List<String> list=new ArrayList<String>();
35     Map<String, String> map=new HashMap<String,String>();
36     Scanner sc=new Scanner(System.in);
37     System.out.println("Enter number of records to be added");
38     int n=sc.nextInt();
39 }
```



```
20 //Fill the code
21 return 0;
22 }
23
24 public List<String> findOrderIdsBasedOnTheTyreType(String tyreType){
25     //Fill the code
26     return null;
27 }
28
29 }
30
31 public static void main(String args[]) {
32     // You are provided with the main method as code template and it is excluded from evaluation
33     TyreMain main=new TyreMain();
34     List<String> list=new ArrayList<String>();
35     Map<String, String> map=new HashMap<String,String>();
36     Scanner sc=new Scanner(System.in);
37     System.out.println("Enter number of records to be added");
38     int n=sc.nextInt();
39     System.out.println("Enter the records (Order Id: Tyre Type)");
40     String [] recordDetails = new String[n];
41     for(int i=0;i<n;i++){
42         recordDetails[i] = sc.next();
43     }
44
45     for(int i=0;i<recordDetails.length;i++) {
46         String[] a = recordDetails[i].split(":");
47         map.put(a[0], (a[1]));
48         main.setTyreMap(map);
49     }
50
51
52     System.out.println("Enter the Tyre type to be searched");
53     String searchType=sc.next();
54
55     int count=main.findCountOfOrderIdsBasedOnTheTyreType(searchType);
56 }
```

Qualifier Assessment MRF tyres: x +

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=105431&userid=137159#

File List Save Compile & Run Evaluate Reset Restore Description

File list

MRFTyres

src

TyreMain.java

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```
main.setTyreMap(map);
}

System.out.println("Enter the Tyre type to be searched");
String searchType=sc.next();

int count=main.findCountOfOrderIdsBasedOnTheTyreType(searchType);
if(count>0)
{
    System.out.println("The Order Ids based on "+searchType+" are "+count);
}
else
{
    System.out.println("No Order Ids were found for "+searchType);
}

System.out.println("Enter the Tyre type to identify the Order Ids");
String tyreType=sc.next();

list=main.findOrderIdsBasedOnTheTyreType(tyreType);

if(list.size()>1) {
    System.out.println("Order Ids based on the="+tyreType+" are ");
    for(String s:list)
    {
        System.out.println(s);
    }
}
else
    System.out.println("No Order Ids were found for the "+tyreType);
}
```