

Tech-Savvy Steels

Grade settings: Maximum grade: 100

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

Based on: [Tech-Savvy Steels](#)

Run: Yes **Evaluate:** Yes

Automatic grade: Yes

Tech-Savvy Steels are a well-known Wholesale Steel company across the city. They wanted to find and count the Order Ids based on the Steel 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: SteelMain Class

Type (Class)	Attributes	Methods
SteelMain	private Map<String, String> steelMap	Getter and setter methods for the attribute are included in the code skeleton.

Note: Here the steelMap, holds the Key as orderId and Value as steelType.

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

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

Requirement 2: Filter the orderIds based on the steelType.

Type (Class)	Methods	Responsibilities
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SteelMain	<pre> public List<String> findOrderIdsBasedOnTheSteelType(String steelType) </pre>	<p>This method filters the orderIds and returns the list of order Ids that have the same steelType.</p> <p><i>Condition: steelType is a case-insensitive</i></p>
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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: Steel Type)

SDJH2376:Stainless

ASHG2323:Alloy

SDJJ2368:Tool

Enter the Steel type to be searched

tool

The Order Ids based on tool are 1

Enter the Steel type to identify the Order Ids

alloy

Order Ids based on the alloy are

ASHG2323

Sample Input/Output 2:

Enter number of records to be added

2

Enter the records (Order Id: Steel Type)

SDJJ2382:Alloy

AJHJ9938:Tool

Enter the Steel type to be searched

Stainless

No Order Ids were found for Stainless

Enter the Steel type to identify the Order Ids

tool

Order Ids based on the tool are

AJHJ9938

Sample Input/Output 3:

Enter number of records to be added

2

Enter the records (Order Id: Steel Type)

ASHJ2327:Tool

JDJD2387:Alloy

Enter the Steel type to be searched

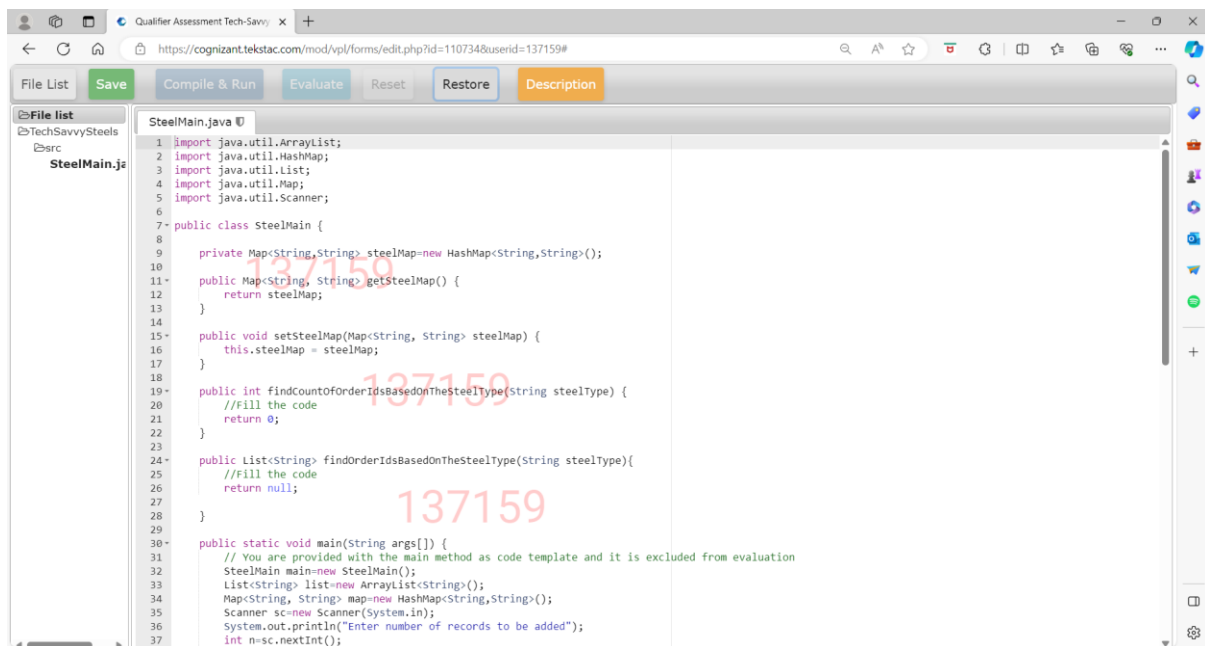
alloy

The Order Ids based on alloy are 1

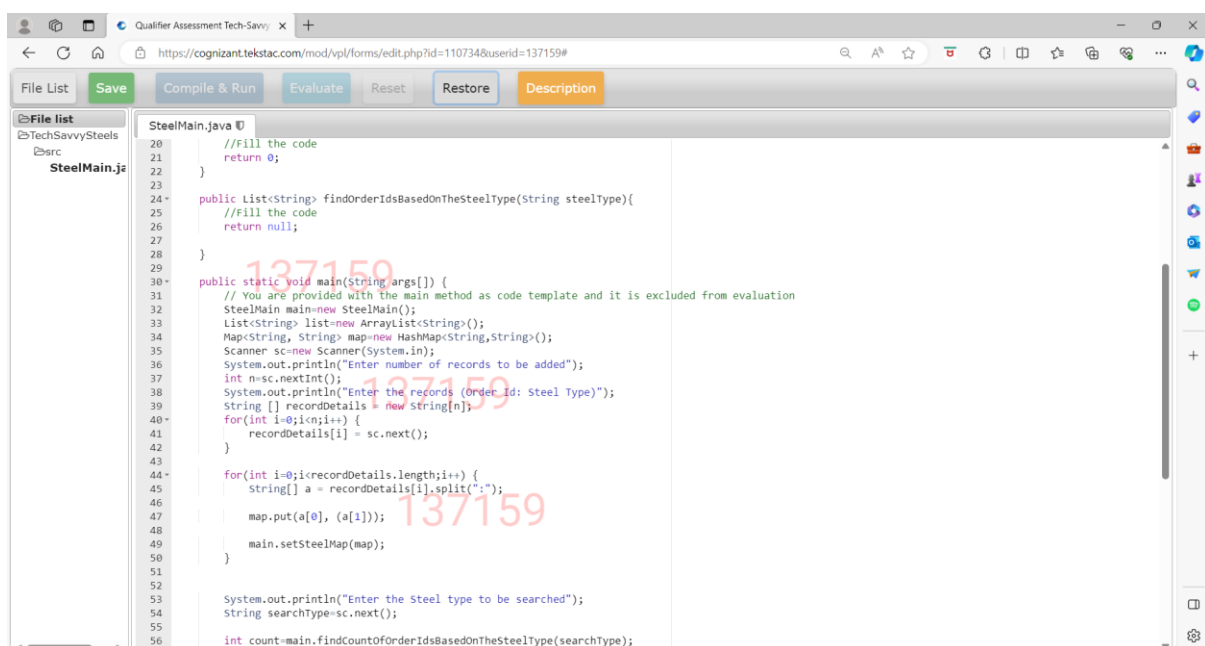
Enter the Steel type to identify the Order Ids

stainless

No Order Ids were found for the stainless



```
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 SteelMain {
8
9     private Map<String,String> steelMap=new HashMap<String,String>();
10
11     public Map<String, String> getSteelMap() {
12         return steelMap;
13     }
14
15     public void setSteelMap(Map<String, String> steelMap) {
16         this.steelMap = steelMap;
17     }
18
19     public int findCountOfOrderIdsBasedOnTheSteelType(String steelType) {
20         //Fill the code
21         return 0;
22     }
23
24     public List<String> findOrderIdsBasedOnTheSteelType(String steelType){
25         //Fill the code
26         return null;
27     }
28
29
30     public static void main(String args[]) {
31         // You are provided with the main method as code template and it is excluded from evaluation
32         SteelMain main=new SteelMain();
33         List<String> list=new ArrayList<String>();
34         Map<String, String> map=new HashMap<String,String>();
35         Scanner sc=new Scanner(System.in);
36         System.out.println("Enter number of records to be added");
37         int n=sc.nextInt();
```



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

Qualifier Assessment Tech-Savvy

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=110734&userid=137159#

File ListSaveCompile & RunEvaluateResetRestoreDescription

File list

TechSavvySteels

src

SteelMain.java

SteelMain.java

```
48      main.setSteelMap(map);
49  }
50
51
52
53  System.out.println("Enter the Steel type to be searched");
54  String searchType=sc.next();
55
56  int count=main.findCountOfOrderIdsBasedOnTheSteelType(searchType);
57  if(count>0)
58  {
59      System.out.println("The Order Ids based on "+searchType+" are "+count);
60  }
61  else
62  {
63      System.out.println("No Order Ids were found for "+searchType);
64  }
65
66  System.out.println("Enter the Steel type to identify the Order Ids");
67  String steelType=sc.next();
68
69  list=main.findOrderIdsBasedOnTheSteelType(steelType);
70
71
72
73  if(list.size()>1) {
74      System.out.println("Order Ids based on the "+steelType+" are ");
75      for(String s:list)
76      {
77          System.out.println(s);
78      }
79  }
80  else
81      System.out.println("No Order Ids were found for the "+steelType);
82  }
83
84  }
```