

## Orcrist Watch(---RETIRED---)

**Grade settings:** Maximum grade: 100

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

**Based on:** [Orcrist Watch\(---RETIRED---\)](#)

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

**Automatic grade:** Yes

Orcrist is one of the famous watch brands. They establish their brand all over the city. They now wanted to automate the process of calculating the cost of watch for the customers. The manager intimates a software developer to help in their process. You being a software developer, develop a Java program based on the requirement.

### Component Specification: OrderInfo

Type(Class)	Attributes	Methods
<b>OrderInfo</b>	String orderId  String customerName  String watchModel  int quantity	Appropriate getter, setters and a four-argument constructor provided as a part of code skeleton.

**Functional Requirement 1:** Extract the order details and create an object of OrderInfo class.

Type(Class)	Methods	Responsibilities
<b>UserInterface</b>	public static OrderInfo <b>extractDetails</b> (String orderDetails)	This method accepts orderDetails separated by comma as a single argument and should extract the properties of the OrderInfo from the argument. Set these values to the OrderInfo object and return this object

**Functional Requirement2:** Calculate the watch cost to be paid by the customer.

Type(Class)	Methods	Responsibilities
<b>OrderInfo</b>	public double <b>calculateWatchCost</b> ()	This method is used to calculate the total cost to be paid by the customer.  The watchModel and the cost per watch is given in the test data.  <b>Condition:</b> <ul style="list-style-type: none"><li><i>watchModel</i> is case-insensitive.</li></ul>

		<ul style="list-style-type: none"> <li>• The <b>watchModel</b> must be either one of [<b>OrcristVox2</b>, <b>OrcristVox1</b>, <b>OrcristTrx1000</b>] else return -1.</li> <li>• The <b>quantity</b> must be <b>greater than zero</b>, else return -1.</li> </ul>
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watchModel	Cost per watch
OrcristVox2	5200
OrcristVox1	4600
OrcristTrx1000	3200
OrcristRvs2	2500

**Formula to calculate the watch cost:**

**Total cost = quantity \* Cost per watch**

**[find the cost based on the watchModel from the above table]**

If the quantity is 2 and watchModel is "OrcristVox2",

Total cost = 2 \* 5200 = 10400.0

**The main method in the UserInterface class is excluded from the evaluation. You are free to write your own code in the main method to invoke the business methods to check its correctness.**

**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.
- Ensure to provide the names for classes, attributes, and methods as specified in the question.
- Adhere to the code template, if provided.

**Sample Input 1:**

Enter the order details

**W001:James:OrcristVox1:3**

**Sample Output 1:**

Order Id : W001

Customer Name : James

Watch Model : OrcristVox1

Quantity : 3

Total cost to be paid : 13800.0

**Sample Input 2:**

Enter the order details

**W002:John:OrcristVox3:3**

**Sample Output 2:**

Invalid details

**Explanation:** As the watchModel is not one among the mentioned watchModel, the given detail is considered as invalid.

**Sample Input 3:**

Enter the order details

**W003:Dave:OrcristVox1:-6**

**Sample Output 3:**

Invalid details

**Explanation:** As quantity is less than zero, the given detail is considered as invalid

Qualifier Assessment Orcrist Watch

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=110129&userid=137159#

File List Save All Compile & Run Evaluate Reset Restore Description

File list  
OrcristWatch  
src  
OrderInfo.java  
UserInterface.java

```
1 public class OrderInfo {
2     private String orderId;
3     private String customerName;
4     private String watchModel;
5     private int quantity;
6
7     public String getOrderId() {
8         return orderId;
9     }
10    public void setOrderId(String orderId) {
11        this.orderId = orderId;
12    }
13    public String getCustomerName() {
14        return customerName;
15    }
16    public void setCustomerName(String customerName) {
17        this.customerName = customerName;
18    }
19    public String getWatchModel() {
20        return watchModel;
21    }
22    public void setWatchModel(String watchModel) {
23        this.watchModel = watchModel;
24    }
25    public int getQuantity() {
26        return quantity;
27    }
28    public void setQuantity(int quantity) {
29        this.quantity = quantity;
30    }
31    public OrderInfo() {
32        super();
33    }
34    public OrderInfo(String orderId, String customerName, String watchModel, int quantity) {
35        super();
36    }
37 }
```

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```
16 }
17 public void setCustomerName(String customerName) {
18     this.customerName = customerName;
19 }
20 public String getWatchModel() {
21     return watchModel;
22 }
23 public void setWatchModel(String watchModel) {
24     this.watchModel = watchModel;
25 }
26 public int getQuantity() {
27     return quantity;
28 }
29 public void setQuantity(int quantity) {
30     this.quantity = quantity;
31 }
32 public OrderInfo() {
33     super();
34 }
35 }
36 public OrderInfo(String orderId, String customerName, String watchModel, int quantity) {
37     super();
38     this.orderId = orderId;
39     this.customerName = customerName;
40     this.watchModel = watchModel;
41     this.quantity = quantity;
42 }
43 public double calculateWatchCost() {
44     // Fill the code here
45     return 0;
46 }
47 }
48 }
49 }
50 }
51 }
52 }
```

