# DDR Electronic Management(---RETIRED---)

**Grade settings**: Maximum grade: 100
**Disable external file upload, paste and drop external content**: Yes
**Based on**: DDR Electronic Management(---RETIRED---)
**Run**: Yes **Evaluate**: Yes
**Automatic grade**: Yes

DDR is one of the famous electronic products manufacturing companies. They wanted to choose the batteries for their products based on the watt power. 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: BatteryMain Class

| Type (Class) | Attributes | Methods |
|---|---|---|
| **BatteryMain** | private Map<String, Interger> batteryNameMap | Getter and setter methods for the attribute are included in the code skeleton. |

***Note:*** *Here the batteryNameMap, holds the Key as batteryName and Value as watt.*

### Requirement 1: Find the watt power of the batteryName passed as argument

| Type (Class) | Methods | Responsibilities |
|---|---|---|
| **BatteryMain** | public float **findWattPowerBasedOnBatteryName**(String batteryName) | This method accepts batteryName as argument. If the batteryName is found in the Map, return their watt power. Else return -1.<br><br>***Condition: batteryName is case-insensitive.*** |

### Requirement 2: Find the list of highest watt batteryName and return it.

| Type (Class) | Methods | Responsibilities |
|---|---|---|
| **BatteryMain** | public List<String> **findHighestWattBatteries()** | This method filters the records and returns the list of battery names which satisfies the requirement.<br><br>***Condition:*** *If more than one battery has the highest watt those* |

| | | |
|---|---|---|
| | | *batteryNames get added to the list.* |

**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:

**5**

Enter the battery records ( Battery Name:Watt(W) ):

**Hero Cell:30**

**Bull Cell:40**

**Ivp Cell:70**

**Tvp Cell:20**

**Netron Cell:70**

Enter the battery name needs to be searched

**Hero Cell**

The watt power of the battery Hero Cell is 30

Batteries with the highest watt power are:

Netron Cell

Ivp Cell

**Sample Input/Output 2:**

Enter number of records to be added:

**3**

Enter the battery records ( Battery Name:Watt(W) ):

**Bunsen cell:60**

**ClarkCell:40**

**DryCell:50**

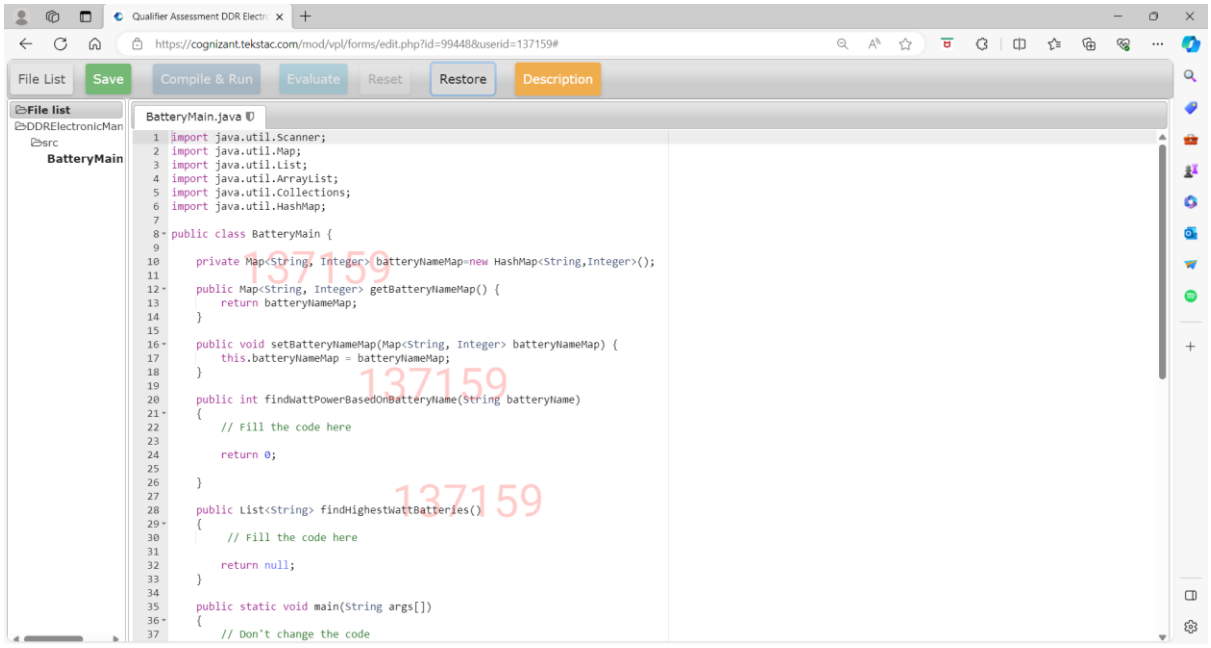
Enter the battery name needs to be searched

**Dsv Cell**

Dsv Cell is an invalid battery name

Batteries with the highest watt power are:

Bunsen cell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File List
Save
Compile & Run
Evaluate
Reset
Restore
Description
File list
DDRElectronicMan
src
BatteryMain
BatteryMain.java
import java.util.Scanner;
import java.util.Map;
import java.util.List;
import java.util.ArrayList;
import java.util.Collections;
import java.util.HashMap;
public class BatteryMain {
private Map<String, Integer> batteryNameMap=new HashMap<String,Integer>();
public Map<String, Integer> getBatteryNameMap() {
return batteryNameMap;
}
public void setBatteryNameMap(Map<String, Integer> batteryNameMap) {
this.batteryNameMap = batteryNameMap;
}
public int findWattPowerBasedOnBatteryName(String batteryName)
{
// Fill the code here
return 0;
}
public List<String> findHighestWattBatteries()
{
// Fill the code here
return null;
}
public static void main(String args[])
{
// Don't change the code
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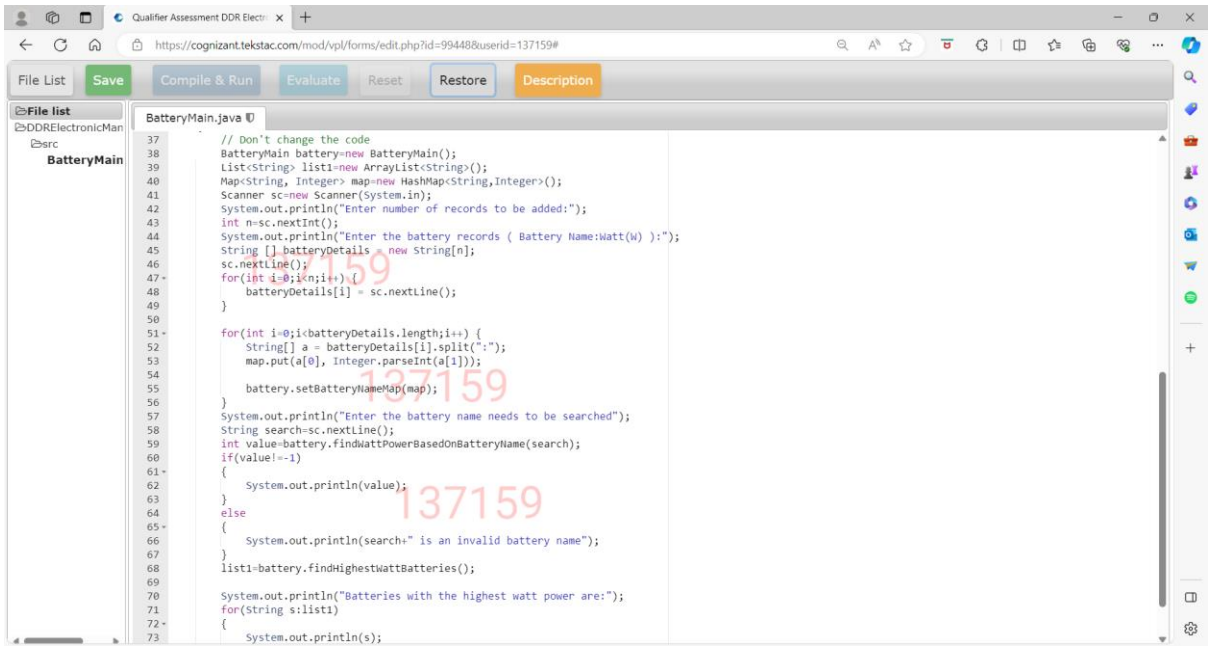
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File List
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Reset
Restore
Description
File list
DDRElectronicMan
src
BatteryMain
BatteryMain.java
// Don't change the code
BatteryMain battery=new BatteryMain();
List<String> list1=new ArrayList<String>();
Map<String, Integer> map=new HashMap<String,Integer>();
Scanner sc=new Scanner(System.in);
System.out.println("Enter number of records to be added:");
int n=sc.nextInt();
System.out.println("Enter the battery records ( Battery Name:Watt(W) ):");
String [] batteryDetails = new String[n];
sc.nextLine();
for(int i=0;i<n;i++){
batteryDetails[i] = sc.nextLine();
}
for(int i=0;i<batteryDetails.length;i++) {
String[] a = batteryDetails[i].split(":");
map.put(a[0], Integer.parseInt(a[1]));
battery.setBatteryNameMap(map);
}
System.out.println("Enter the battery name needs to be searched");
String search=sc.nextLine();
int value=battery.findWattPowerBasedOnBatteryName(search);
if(value!=-1)
{
System.out.println(value);
}
else
{
System.out.println(search+" is an invalid battery name");
}
list1=battery.findHighestWattBatteries();
System.out.println("Batteries with the highest watt power are:");
for(String s:list1)
{
System.out.println(s);
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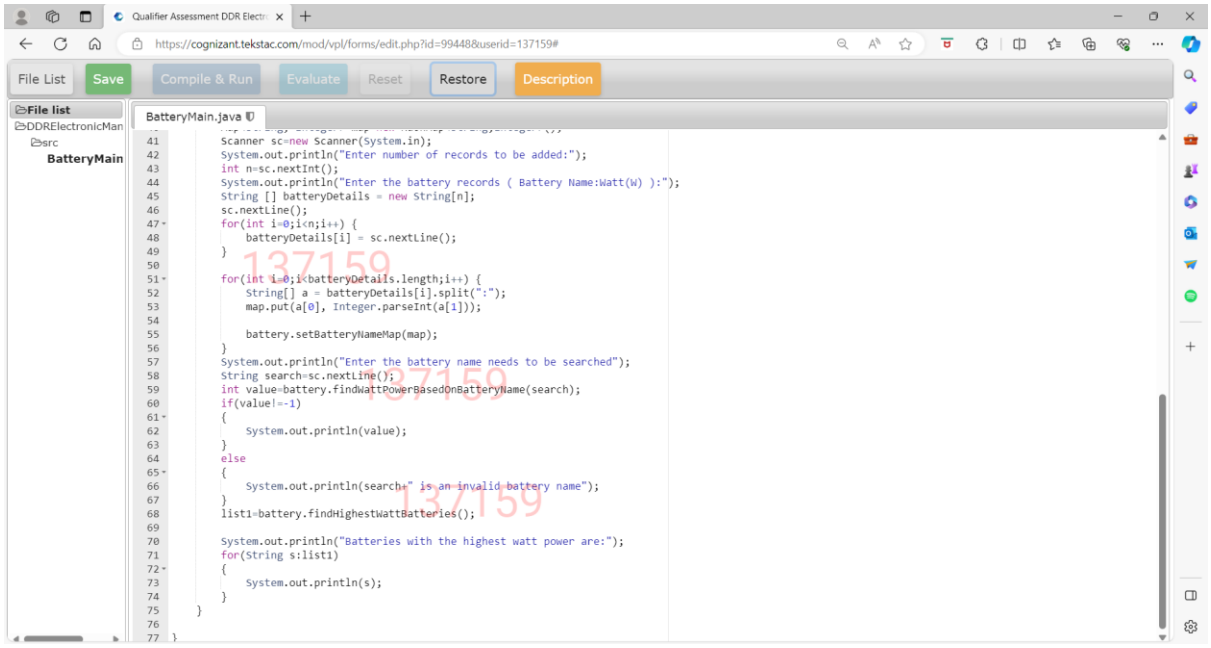
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Scanner sc=new Scanner(System.in);
System.out.println("Enter number of records to be added:");
int n=sc.nextInt();
System.out.println("Enter the battery records ( Battery Name:Watt(W) ):");
String [] batteryDetails = new String[n];
sc.nextLine();
for(int i=0;i<n;i++) {
batteryDetails[i] = sc.nextLine();
}
for(int i=0;i<batteryDetails.length;i++) {
String[] a = batteryDetails[i].split(":");
map.put(a[0], Integer.parseInt(a[1]));
battery.setBatteryNameMap(map);
}
System.out.println("Enter the battery name needs to be searched");
String search=sc.nextLine();
int value=battery.findWattPowerBasedOnBatteryName(search);
if(value!=-1)
{
System.out.println(value);
}
else
{
System.out.println(search+" is an invalid battery name");
}
list1=battery.findHighestWattBatteries();
System.out.println("Batteries with the highest watt power are:");
for(String s:list1)
{
System.out.println(s);
}
}
}
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