PRE PRA 2 Assessment 1 A...   120 minutes

Question - 1
JDBC 1   SCORE: **1 points**

JDBC

```
Connection conn = DriverManager.getConnection(url, username, password);
  Statement stmt = conn.createStatement();
  ResultSet rs = stmt.executeQuery("SELECT * FROM employees");
  ```
  What JDBC objects are being correctly instantiated in the code snippet above?
```

○ `Connection`, `PreparedStatement`, `ResultSet`

◉ `Connection`, `Statement`, `ResultSet`
`

○ `Connection`, `Statement`, `PreparedStatement`

○ `PreparedStatement`, `Statement`, `ResultSet`

## Question - 2
**JDBC 2**                                                    SCORE: **1 points**

JDBC

```
String sql = "INSERT INTO products (id, name, price) VALUES (?, ?, ?)";
  PreparedStatement pstmt = conn.prepareStatement(sql);
  pstmt.setInt(1, 101);
  pstmt.setString(2, "Keyboard");
  pstmt.setDouble(3, 29.99);
  int rowsAffected = pstmt.executeUpdate();
  ```
  What does `rowsAffected` variable represent after executing the above code?
```

○ Number of rows deleted from `products` table

○ Number of rows updated in `products` table

◉ Number of rows inserted into `products` table

○ Number of rows selected from `products` table

Question - 3
JDBC 3   SCORE: **1 points**

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```
Connection conn = DriverManager.getConnection(url, username, password);
  String sql = "UPDATE employees SET salary = ? WHERE department = ?";
  PreparedStatement pstmt = conn.prepareStatement(sql);
  pstmt.setDouble(1, 50000.00);
  pstmt.setString(2, "HR");
  int rowsUpdated = pstmt.executeUpdate();
What does `rowsUpdated` variable represent after executing the above code?
```

- ( ) Number of rows deleted from `employees` table
- (●) Number of rows updated in `employees` table
- ( ) Number of rows inserted into `employees` table
- ( ) Number of rows selected from `employees` table

Question - 4
JDBC 4

SCORE: **1 points**

JDBC

```
Connection conn = DriverManager.getConnection(url, username, password);
  String sql = "SELECT * FROM orders WHERE order_date >= ?";
  PreparedStatement pstmt = conn.prepareStatement(sql);
  pstmt.setDate(1, Date.valueOf("2023-01-01"));
  ResultSet rs = pstmt.executeQuery();
  ```
  What is the correct method used to set the `Date` parameter in the prepared statement?
```

- (●) `setDate(int parameterIndex, java.sql.Date x)`

- ( )
  ```
      `setInt(int parameterIndex, java.sql.Date x)`
      `
  ```

- ( ) `setString(int parameterIndex, java.sql.Date x)`

- ( ) `setDouble(int parameterIndex, java.sql.Date x)`

## Question - 5
**JDBC 5**

SCORE: **1 points**

JDBC

Suyash wants to retrieve the auto-generated keys after executing an INSERT statement in JDBC. Which method should suyash use?

- ( ) executeUpdate()

○ executeQuery()

◉ getGeneratedKeys()

○ getResultSet()

## Question - 6
**JDBC 6**

SCORE: **1 points**

JDBC

---

John needs to manage database transactions in your Java application. Which JDBC interface should john use to accomplish this?

◉ Connection

○ Statement

○ ResultSet

○ DatabaseMetaData

## Question - 7
**JDBC 7**

SCORE: **1 points**

JDBC

---

```
Which resources have their close() method called when this code runs?                          public static
void runQuery(Connection conn) throws SQLException {
    try (Statement stmt = conn.createStatement()) {
        ResultSet rs = stmt.executeQuery("select * from clowns");
        rs.next();
    }
}
```

○ No close() methods are called

○ Only Statement

○ Only statement and connection

◉ Only statement and resultset

Question - 8
JDBC 8

SCORE: **1 points**

JDBC

What is a database transaction in the context of JDBC?

○ A query that retrieves data from multiple tables

○ A single SQL statement

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○ A group of SQL statements executed as a single unit

○ A stored procedure in the database

Question - 9
JDBC 9

JDBC

```
Connection conn = DriverManager.getConnection(url, username, password);
  Statement stmt = conn.createStatement();
  String sql = "DELETE FROM customers WHERE age < 18";
  int rowsDeleted = stmt.executeUpdate(sql);
```

◉ Number of rows deleted from `customers` table

○ Number of rows updated in `customers` table

○ Number of rows inserted into `customers` table

○ Number of rows selected from `customers` table

Question - 10
JDBC 10

JDBC

The performance of the application will be faster if you use PreparedStatement interface because query is compiled only once.

○ FALSE

◉ TRUE

Question - 11
JDBC 15

JDBC

Which of the following is used to limit the number of rows returned?

◉ setMaxRows(int i)

○ setMinRows(int i)

○ getMaxrows(int i)

○ getMinRows(int i)

Question - 12

JDBC 14

JDBC

How do you close a JDBC `ResultSet` object `rs` and `Statement` object `stmt` properly?

○ `rs.close(); stmt.close();`

⦿   `stmt.close(); rs.close();`

○ `close(rs, stmt);`

○ `stmt.close();`

Question - 13
JDBC 13

JDBC

How do you iterate through a `ResultSet` object `rs` and print all rows of data?
`

○ `while (rs.hasNext()) { ... }`

⦿ `while (rs.next()) { ... }`

○   'for (Row row : rs) { ... }`

○ `for (int i = 0; i < rs.size(); i++) { ... }

Question - 14
JDBC 4

JDBC

How do you correctly load a JDBC driver for MySQL using `Class.forName`?

○ `Class.forName("com.mysql.Driver");`

○ `Class.forName("mysql.jdbc.Driver");`

○ `Class.forName("org.mysql.jdbc.Driver");`

⦿ `Class.forName("com.mysql.jdbc.Driver");`

Question - 15
JDBC 1

JDBC

Which class is used to load the JDBC driver?

○ java.sql.Connection

○ java.sql.ResultSet

○ java.sql.Statement

◉ java.sql.DriverManager

Question - 16
JAVA WEB 1

JAVA WEB

```jsp
jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<html>
<body>
<%
        int x = 10;
        out.println("Value of x is: " + x);
    %>
</body>
</html>
   ```
   What will be the output of the above JSP code?
```

◉ Value of x is: 10

○ Value of x is: <% out.println("10"); %>

○ Compilation Error

○ Runtime Error

Question - 17
JAVA WEB 2

JAVA WEB

```
<%@ page import="java.util.Date" %>
<html>
<body>
<%
        Date currentDate = new Date();
        out.println("Current date: " + currentDate);
    %>
</body>
</html>
   ```
   What will be the output of the above JSP code?
```

○ Current date: Thu Jan 01 00:00:00 UTC 1970

○ Current date: <% out.println(new Date()); %>

○ Compilation Error

○ Runtime Error

## Question - 18
**JAVA WEB 4**

SCORE: 1 points

`JAVA WEB`

```
<%@ page import="java.util.*" %>
<html>
<body>
<%
        ArrayList<String> names = new ArrayList<>();
        names.add("Alice");
        names.add("Bob");
        names.add("Charlie");
        for (String name : names) {
            out.println(name + "<br>");
        }
    %>
</body>
</html>
    ```
  What will be displayed in the browser when the JSP page is rendered?
```

● Alice
Bob
Charlie

○ AliceBobCharlie

○ Compilation Error

○ Runtime Error

Question - 19
JAVA WEB 6

SCORE: **1 points**

`JAVA WEB`

```java
  import javax.servlet.http.*;
  import javax.servlet.*;
  import java.io.*;
  public class HelloServlet extends HttpServlet {
      public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException {
        PrintWriter out = response.getWriter();
        out.println("<html><body>");
        out.println("<h1>Hello World!</h1>");
        out.println("</body></html>");
      }
    }
```

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```
What does this servlet do when a GET request is made to it?
```

○ Prints "Hello World!" on the console.

◉ Sends a HTTP response with "Hello World!" as HTML.

○ Throws a ServletException

○ Compilation Error

Question - 20
JAVA WEB 3

JAVA WEB

```
<%@ page language="java" %>
<html>
<body>
<%
        String name = "John";
        %>
<h1>Welcome <%= name %></h1>
</body>
</html>
   ```
   What will be displayed in the browser when the JSP page is rendered?
```

◉ Welcome John

○ Welcome <%= name %>

○ Compilation Error

○ Runtime Error

## Question - 21
**JAVA WEB 5**

JAVA WEB

request is instance of which one of the following classes?

○ Request

○ HttpRequest

◉ HttpServletRequest

○ ServletRequest

## Question - 22
**JAVA WEB 8**

```
import javax.servlet.http.*;
  import javax.servlet.*;
  import java.io.*;
  public class GreetingServlet extends HttpServlet {
      public void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException {
          String name = request.getParameter("name");
          PrintWriter out = response.getWriter();
          out.println("Hello, " + name + "!");
      }
  }
  ```
  How does this servlet process data from an HTML form submitted via POST?
```

( ) Retrieves request headers.

( ) Retrieves query parameters.

(●) Retrieves form data.

( ) Sends a redirect response

Question - 23
JAVA WEB 7

SCORE: **1 points**

JAVA WEB

```
import javax.servlet.http.*;
  import javax.servlet.*;
  import java.io.*;
  public class CounterServlet extends HttpServlet {
      int count = 0;
      public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException {
          PrintWriter out = response.getWriter();
          count++;
          out.println("Counter: " + count);
      }
  }
  ```
  What does this servlet do when multiple GET requests are made to it?
```

( ) Prints "Counter: 1" each time.

( ) Prints "Counter: 2" each time.

(●) Prints an incrementing counter value.

( ) Throws a ServletException.

## Question - 24
**JAVA WEB 10**

SCORE: **1 points**

When destroy() method of a filter is called?

- ⦿ The destroy() method is called only once at the end of the life cycle of a filter

- ◯ The destroy() method is called after the filter has executed doFilter method

- ◯ The destroy() method is called only once at the begining of the life cycle of a filter

- ◯ The destroyer() method is called after the filter has executed

# Question - 25
## JAVA WEB 11

SCORE: **1 points**

JAVA WEB

```
<%@ page import="java.util.*" %>
<html>
<body>
<%
    String[] fruits = {"Apple", "Banana", "Cherry"};
    for (String fruit : fruits) {
        out.println(fruit + "<br>");
    }
%>
</body>
</html>
```
what will it display after execution ?

- ⦿ Apple<br>Banana<br>Cherry<br>

- ◯ AppleBananaCherry

- ◯ Compilation Error

- ◯ Runtime Error

# Question - 26
## JAVA WEB 13

SCORE: **1 points**

JAVA WEB

```
import javax.servlet.http.*;
import javax.servlet.*;
import java.io.*;
public class InitializationServlet extends HttpServlet {
    public void init() throws ServletException {
        System.out.println("Servlet initialized");
    }
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
        PrintWriter out = response.getWriter();
        out.println("Servlet running");
```

```
    }
  }
```

( ) Prints "Servlet initialized" on the console.

( ) Throws a ServletException.

( ) Prints "Servlet running" on the console.

( ) Displays "Servlet initialized" on the browser

Question - 27
JAVA WEB 2

SCORE: 1 points

JAVA WEB

```
import javax.servlet.http.*;
  import javax.servlet.*;
  import java.io.*;
  public class ParameterServlet extends HttpServlet {
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
      String param = request.getParameter("param");
      PrintWriter out = response.getWriter();
      out.println("Parameter value: " + param);
    }
  }
```

How does this servlet retrieve the value of query parameter "param" from a GET request?

( ) Using request.getHeader("param")

( ) Using request.getAttribute("param")

(●) Using request.getParameter("param")

( ) Using request.getPathInfo()

Question - 28
JAVA WEB 12

SCORE: 1 points

JAVA WEB

```
<%@ page import="java.util.*" %>
<html>
<body>
<%
    String str = "Hello";
    out.println(str.substring(10));
  %>
</body>
</html>
```

What will be displayed in the browser when the JSP page is executed?

( ) Hello

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- ○ Compilation Error

- ○ Runtime Error

- ⦿ IndexOutOfBoundsException

Question - 29
JAVA WEB 9

JAVA WEB

In a servlet, which method is typically used to access initialization parameters from ServletConfig?

- ○ doGet()

- ○ doPost()

- ⦿ service()

Question - 30
Advance Java2

Advance Java

```
Suyash is facing issue with the code in exception handling , help suyash to find out what will exactly be the
result for his code :
class Demo
{

void show() throws ClassNotFound

Exception()

}

class Demo2 extends Demo {

void show() throws IllegalAccess Exception,

ClassNotFoundException, Arithmetic
Exception
{
System.out.println("In Demo1

Show");
}
 public static void main(String ar[]) {

try{ Demo2 d = new Demo2();

d.show();

catch(Exception e) {}

}}
```

- ⦿ Does not Compile

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- ( ) Compiles successfully

- ( ) Compile successfully and will show "In Demo1 Show"

- ( ) Compiles but does not execute

Question - 31
Advance Java4

SCORE: **1 points**

Advance Java

What is the output of the following Java code snippet?
```
public class MyClass {
public static void main(String[] args) {
String str = "Java";
str.concat("Programming");
System.out.println(str);
}
}
```

- ( ) JavaProgramming

- ( ) Programming

- (●) Java

- ( ) Compiler error

Question - 32
Advance Java1

SCORE: **1 points**

Advance Java

```
What will be the output for following code ?

    public class A
{
        public static void main (String args[])
{

    Class B
{
        public String name;
        public B(String s)
{

        name = s;

}
}

        B obj =new B("Yupee");
        System.out.println(obj.name);

}
}
```

- ( ) An exception occurs at run time

- ⦿ It will print "Yupee"

- ○ Compilation error

- ○ None of the above

Question - 33
Advance Java5

Advance Java

What is the output of the following code snippets for Advanced Java?
Snippet 1
String s = ""hello"";
s.replace('l', 'w');
System.out.println(s);
```

Snippet 2:
```
String s = ""hello"";
s = s.replace('l', 'w');
System.out.println(s);

- ○ hello, hello

- ○ hewwo, hewwo

- ⦿ hello, hewwo

- ○ hewwo, hello

## Question - 34
**Advance Java3**

Advance Java

```
What is the result of the following code : class Test
{
    static void test() throws Runtime-Exception
{
   throw new ArithmeticException();
}

public static void main (String args[])
{
try{
test();
}
catch (RuntimeException re)
{
System.out.println("Exception Handled");
}
}}
```

- ○ Checked Exception is generated

◯ Does not Compile

⦿ Prints "Exception Handled"

◯ Class compiles but nothing is printed on console

Question - 35
Advance Java6

Advance Java

What is the output of the following code snippets for Advanced Java?
Snippet 1:
```
```
String s1 = ""hello"";
String s2 = ""hello"";
System.out.println(s1 == s2);
```
```

Snippet 2:
```
```
String s1 = new String(""hello"");
String s2 = new String(""hello"");
System.out.println(s1 == s2);
```
```

◯ true, false

⦿ false, false

◯ true, true

◯ false, true

Question - 36
Advance Java7

Advance Java

```java
class A {
    void display() {
        System.out.println("A's display method");
    }
}
class B extends A {
    void display() {
        System.out.println("B's display method");
    }
}
class C extends B {
    void display() {
        System.out.println("C's display method");
    }
}
public class Main {
    public static void main(String[] args) {
        A obj = new C();
        obj.display();
```

```
    }
  }
  ```
  What will be the output of the above code?
```

- ( ) A's display method

- ( ) B's display method

- (●) C's display method

- ( ) Compilation Error

Question - 37
Advance Java8

Advance Java

```java
class A {
    void display() {
        System.out.println("A's display method");
    }
}
class B extends A {
    void display() {
        System.out.println("B's display method");
    }
}
public class Main {
    public static void main(String[] args) {
        B obj1 = new B();
        A obj2 = (A)obj1;
        obj2.display();
    }
}
```

- (●) B's display method

- ( ) A's display method

- ( ) Compilation Error

- ( ) Runtime Error

Question - 38
Advance Java10

SCORE: 1 points

Advance Java

```java
public class Main {
    public static void main(String[] args) {
        try {
            String[] names = {"John", "Jane"};
            System.out.println(names[2]);
        } catch (ArrayIndexOutOfBoundsException e) {
```

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```
                System.out.println("Array index out of bounds");
            } catch (Exception e) {
                System.out.println("Exception caught");
            } finally {
                System.out.println("Finally block executed");
            }
        }
    }
    What will the expected output of following code snippet ?
```

○ Array index out of bounds

○ ArrayIndexOutOfBoundsException

◉ Array index out of bounds Finally block executed

○ Finally block executed

Question - 39
Advance Java 2

Advance Java

```java
public class Main {
    public static void main(String[] args) {
        try {
            String str = "123";
            int num = Integer.parseInt(str);
            System.out.println(num / 0);
        } catch (ArithmeticException e) {
            System.out.println("ArithmeticException caught");
        }
    }
}
```

What will be the output of the above code?

◉ "ArithmeticException caught"

○ "ArithmeticException"

○ "Divide by zero"

○ Compilation Error

Question - 40
Advance Java 5

Advance Java

```java
interface Animal {
    void makeSound();
}
class Dog implements Animal {
    public void makeSound() {
        System.out.println("Bark");
```

```
    }
}
public class Main {
  public static void main(String[] args) {
    Animal a = new Dog();
    a.makeSound();
  }
}
```
What will be the expected output of this snippet ?

○ "Animal sound"

◉ "Bark"

○ Compilation Error

○ Runtime Error

Question - 41
Advance Java 7

SCORE: **1 points**

Advance Java

```
class Parent {
  void display() {
    System.out.println("Parent's display method");
  }
}
class Child extends Parent {
  void display() {
    System.out.println("Child's display method");
  }
}
public class Main {
  public static void main(String[] args) {
    Parent p = new Child();
    p.display();
  }
}
```
What will be the output of the above code?

○ "Parent's display method"

◉ "Child's display method "

○ Compilation Error

○ Runtime Error

Question - 42
Advance Java 8

SCORE: **1 points**

Advance Java

Which is the root interface of the Java Collection framework hierarchy?

○ Collection

○ Root

○ Collections

○ List/Set

Question - 43
Advance Java 9

SCORE: **1 points**

Advance Java

Which collection ensures that elements are processed in first-in-first-out (FIFO) order?

○ HashSet

○ LinkedHashSet

⦿ LinkedList

○ PriorityQueue

Question - 44
Polymorphism Set 1 Sagar

SCORE: **10 points**

Java Problem:

Write a Java code to implement Polymorphism using the following guidelines :

1.Write a Java Class named as Animal with a method named as Walk which prints "Animal will walk" excluding double quotes.
2.Inherit the Animal class and name it as Cat and include a overridden method Walk which prints "Cat will walk" excluding double quotes.
3.Create a Solution class with main method, take an string input from the user and based on the same string value create objects of the respective class and call the overridden method to print the output.For example , for String values such as 'Cat','Animal' and 'Both', call the respective class's methods.

Kindly refer the prefilled code for clarity.

Kindly find the sample Test Cases:

Input
Cat

Output
Cat is Walking

Question - 45
Advance Java - Games

SCORE: **30 points**

NOTE: ANY MEANS OF INTENDED PLAGIARISM WHILE ATTEMPTING THIS QUESTION IS LIABLE TO HIGHEST POSSIBLE STRICT HR ACTIONS AS IT IS VIOLATION OF INTEGRITY. HENCE, REFRAIN FROM ANY SUCH MEANS AND ATTEMPT THIS QUESTION AS PER YOUR EXPERTISE ONLY.

Create a class Games with below attributes:

gameId : int
title : String
genre : String
price : double (in dollars)

Write getters, setters and parameterized constructor in the above-mentioned attribute sequence as required.

Create class Solution with main method

Implement two static methods – findAveragePriceOfGamesByGenre and findGameWithSecondHighestPrice in Solution class.

findAveragePriceOfGamesByGenre
Create a static method findAveragePriceOfGamesByGenre in the Solution class. This method will take two parameters, an array of Games objects and one string parameter (genre) and return the average price of games belonging to the specified genre.

findGameWithSecondHighestPrice
Create a static method findGameWithSecondHighestPrice in the Solution class. This method will take an array of Games objects and return the Games object having second highest price
If no game with the above condition is present in the array of Games objects, then the method should return null.

These methods should be called from the main method.

Write code to perform the following tasks :

1. Take the necessary input variable and call **findAveragePriceOfGamesByGenre**. For this method - The main method should print the average price of games belonging to specified genre as it is if the returned value is not 0, or it should print "**No Games found belonging to specified genre.**"

2. Take the necessary input variable and call **findGameWithSecondHighestPrice** . For this method - The main method should print the Games details of the game with second highest price if the returned value is not null, or it should print '**No Games found**'

Note:

The above-mentioned static methods should be called from the main method. Also write the code for accepting the inputs and printing the outputs. Don't use any static test or formatting for printing the result.

Just invoke the method and print the result

Note: All String comparison needs to be case in-sensitive.

You can use/refer to the below given sample input and output to verify your solution.

The 1st input taken in the main section is the number of Games objects to be added to the list of Games.

 The next set of inputs are gameId,title,genre,price for each Games object taken one after another and is repeated for the number of Games objects given in the first line of input.

Consider below sample input and output to test your code:

Sample Input 1 -

5
101
The Last Of Us
Action
59.99
102
Call of Duty
Shooting
39.17
103
FIFA
Sports
24.76
104
Red Dead Redemption-2
Adventure
49.45
105
Far Cry 3
Adventure
67.77
Adventure

Sample Output 1

Average Price - 58.61
gameId-101
title-The Last Of Us
genre-Action
price-59.99

Sample Output 2 :

3
1234
Terraria
Adventure
56.77
1235
Uncharted
Adventure
84.57
1236
Valheim
Survival
77.89
Battle Royale

Sample Output 2 -

No Games found belonging to specified genre.
gameId-1236
title-Valheim
genre-Survival
price-77.89

NOTE: ANY MEANS OF INTENDED PLAGIARISM WHILE ATTEMPTING THIS QUESTION IS LIABLE TO HIGHEST POSSIBLE STRICT HR ACTIONS AS IT IS VIOLATION OF INTEGRITY. HENCE, REFRAIN FROM ANY SUCH MEANS AND ATTEMPT THIS QUESTION AS PER YOUR EXPERTISE ONLY.

Create a class Restaurant with below attributes:

id-int
name : String
location : String
cuisineType : String
rating : double (out of 10)

Write getters, setters and parameterized constructor in the above-mentioned attribute sequence as required.

Create class Solution with main method

Implement two static methods – **findAverageRatingOfRestaurantByLocation** and **findRestaurantWithSecondLowestRating** in Solution class.

findAverageRatingOfRestaurantByLocation
Create a static method **findAverageRatingOfRestaurantByLocation** in the Solution class. This method will take two parameters, an array of restaurant objects and one string parameter (location) and return the average rating of restaurants belonging to the specified Location.

findRestaurantWithSecondLowestRating
Create a static method **findRestaurantWithSecondLowestRating** in the Solution class. This method will take an array of restaurant objects and return the restaurant object having second lowest rating . If no restaurant with the above condition is present in the array of restaurant objects, then the method should return null.

These methods should be called from the main method.

Write code to perform the following tasks :

1. Take the necessary input variable and call **findAverageRatingOfRestaurantByLocation**. For this method - The main method should print the average rating of restaurants belonging to specified location as it is if the returned value is not 0, or it should print "No Restaurant found belonging to specified Location."

2. Take the necessary input variable and call **findRestaurantWithSecondLowestRating**. For this method - The main method should print the restaurant details of the restaurant with second lowest rating if the returned value is not null, or it should print 'No Restaurant found'

Note:

The above-mentioned static methods should be called from the main method. Also write the code for accepting the inputs and printing the outputs. Don't use any static test or formatting for printing the result.

Just invoke the method and print the result

Note: All String comparison needs to be case in-sensitive.

You can use/refer to the below given sample input and output to verify your solution.

The 1st input taken in the main section is the number of Restaurant objects to be added to the list of Restaurant.

The next set of inputs are id,name,location,cuisineType,rating for each restaurant object taken one after another and is repeated for the number of restaurant objects given in the first line of input.

Consider below sample input and output to test your code:

Sample Input 1 -

5
101
The Gourmet Kitchen
New York
French
9.41
102
La Bella Italia
New York
Italian
8.92
103
Sushi World
San Francisco
Japanese
9.74
104
El Taco Loco
Houston
Mexican
9.67
105
Ocean's Delight
New York
Seafood
7.93
New York

Sample Output 1-

Average Rating - 8.753333333333332
id-102
name-La Bella Italia
location-New York
cuisineType-Italian
rating-8.92

Sample input 2

4
2001
Curry Corner
Houston
Indian
9.7
2002
BBQ Hut

Houston
Barbecue
8.9
2003
Southern Eats
Nevada
Southern
8.8
2004
Bella Italia
Houston
Italian
7.8
New York

Sample Output 2:

No Restaurant found belonging to specified Location.
id-2003
name-Southern Eats
location-Nevada
cuisineType-Southern
rating-8.8

Question - 47
PeriodicTable Java Problem 2

Advanced_Java

Create a class PeriodicTable with the below attributes:
atomicNumber-int
atomicMass- double
symbol- String
elementName-String
groupBlock-String

The above attributes should be private. Write getters, setters, and parameterized constructors as required.
Create a class Solution with the main method.

Implement two static methods - getElementWithSymbol and getAvgAtomicMass in the Solution class.

getElementWithSymbol method:
This method will take an array of PeriodicTable objects and a String value as input parameters.
The method will find out the name of the element for given Symbol(String parameter passed). This method will return the name of the element if found. If there is no PeriodicTable object that matches then the method should return null.

getAvgAtomicMass method:
This method will take an array of PeriodicTable objects as input parameters
This method should return the average atomicMass of PeriodicTable objects.

Note : No two PeriodicTable objects would have the same elementSymbol,groupBlock,atomicMass and elementName.
Search should be case insensitive.

The above mentioned static methods should be called from the main method.

For getElementWithSymbol method - The main method should print the name of the element if the returned value is not null. Otherwise, it should print "No Element present."
For getAvgAtomicMass method - The main method should print the average value returned from the method call.

Before calling these static methods in main, use Scanner object to read the values of four PeriodicTable objects referring attributes in the above mentioned attribute sequence.

Next, read the value for String parameter for capturing the symbol to search for.

Conser below sample input and output:

Input1:

74

183.84

W

Tungsten

TransitionMetal

55

132.90

Cs

Cesium

AlkaliMetal

17

35.45

Cl

Chlorine

Halogen

86

222.01

Rn

Radon

NobleGas

Cl

Output1:

Chlorine

143.55

Input2:

74

183.84

W

Tungsten

TransitionMetal

55

132.90

Cs

Cesium

AlkaliMetal

17

35.45

Cl

Chlorine

Halogen

86

222.01

Rn

Radon

NobleGas

O

Output2:

No Element present.

143.55

```
****************************************************************************
-------------------------------------------------
Sample code snippet for reference:
Please use below code to build your solution.
-------------------------------------------------
import java.util.Scanner;
public class Solution
{
 public static void main(String[] args)
 {
  //code to read values
  //code to call required method
  //code to display the result
}

 //code the first method


 //code the second method
}

//code the class
-------------------------------------------------
Note on using Scanner object:
Sometimes scanner does not read the new line character while invoking methods like nextInt(), nextDouble() etc.
Usually, this is not an issue, but this may be visible while calling nextLine() immediately after those methods.
Conser below input values:
100
Peas
Referring below code:
Scanner sc = new Scanner(System.in);
int x = sc.nextInt();
String str = sc.nextLine(); -> here we expect str to have value name.Instead it may be "".
If above issue is observed, then it is suggested to add one more explicit call to nextLine() after reading numeric value.
```