Empower Java MCQ Test

No negative marks, attempt all questions

Associate ID

Jag

Associate Name

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Which of the following access specifiers of Java, is specified in the member of super class to allow the sub classes belonging to any package and classes of same package, to access?

- ○ public
- ◉ protected
- ○ default
- ○ private

Which of the following is used to make only one copy of variable is available for all objects of a class?

- ◉ static
- ○ final
- ○ transient
- ○ volatile

What is the range of primitive byte data type in Java?

- ○ 0 to 255
- ◉ -128 to 127
- ○ 0 to 65535
- ○ -32768 to 32767

Which of the following is used to store the formated String in a variable?

- ○ System.out.printf
- ○ System.out.format
- ○ String.printf
- ◉ String.format

You want to display all the elements of a LinkedList from last to first. Which of the following is true about that?

- ○ It is not possible to traverse LinkedList in reverse order
- ○ List Iterator can be used to traverse in reverse order
- ○ Convert the List to Set and traverse the elements
- ○ We can loop in reverse order using the index from length-1 to 0

Which of the following is true about java Arrays?

- ○ Arrays can be resized by using new operator without losing the members.
- ○ Arrays can contain any type of data.
- ◉ Arrays can be passed as argument of a method
- ○ Arrays are stored in random memory locations but accessed using index

Which of the following is not a method of Arrays class in Java?

- ○ toString
- ○ deepToString
- ○ sort
- ◉ contains

Which of the following is not a wrapper class in java?

- ○ Double
- ◉ Char
- ○ Float
- ○ Long

Question 2: Mileage Calculation

Raju is fond of bikes.He convinced his parents and bought a new bike.Now he wants to check the mileage of his bike.He is weak in mathematics,so help him to find out the mileage.Petrol price(X),Distance covered in kilometres(Y) and Amount(Z) for which he has filled the petrol is given as inputs.Write a program to find out the mileage of the bike.

Input Format:
First input is a double value that corresponds to the X value.
Second input is a double value that corresponds to the Y value.
Third input is a integer value that corresponds to the Z value.

Output Format:
Output is a double value that denotes the mileage of the bike(rounded off to two decimal places).

Sample Input 1:
70.77
280.50
500

Sample Output 1:
39.70

Sample Input 2:
55.90
320.25
400

Sample Output 2:

44.75

Question 3: MobileBrand - Requirement 1

Requirement 1:

Let’s start off by creating two **Mobile** objects and check whether they are equal.

Create a **Mobile** Class with the following attributes:

Member Field Name

Type

referenceId

String

modelName

String

displaySize

Double

Price

Double

launchedDate

java.util.Date

Mark all the attributes as private Create / Generate appropriate Getters & Setters Add a default constructor and a parameterized constructor to take in all attributes in the given order:
Mobile (String referenceId, String modelName, Double displaySize, Double price, java.util.Date launchedDate) When the “Mobile” object is printed, it should display the following details: **[Override the toString method]**
Print format:
Reference Id: "referenceId"
Model Name: "modelName"
Display Size: "displaySize"
Price: "price"
Launched Date: "launchedDate" Two Mobiles are considered same if they have the same referenceId, and modelName. Implement the logic in the appropriate function. (Case – Insensitive) **[Override the equals method]**

The input format consists of Mobile details separated by a comma in the below order,
referenceId, modelName, displaySize, price, launchedDate

The Input to your program would be details of two Mobiles, you need to display their details as given in "5th point(refer above)" and compare the two Mobiles and display if the Mobiles are same or different.

Note: There is an empty line between display statements. Print the empty lines in the main function.
Display one digit after the decimal point for the Double data type.

Sample Input and Output 1:

Enter mobile 1 detail:

#SM 45 JJ6-001,Galaxy J6,5.6,13990,02-01-2017

Enter mobile 2 detail:

#SM 45 JJ6-001,Galaxy J6,5.6,13990,02-01-2017

Mobile 1

Reference Id: #SM 45 JJ6-001

Model Name: Galaxy J6

Display Size: 5.6

Price: 13990.0

Launched Date: 02-01-2017

Mobile 2

Reference Id: #SM 45 JJ6-001

Model Name: Galaxy J6

Display Size: 5.6

Price: 13990.0

Launched Date: 02-01-2017

Mobile 1 is same as Mobile 2

Sample Input and Output 2:

Enter mobile 1 detail:

#SM 45 JJ6-001,Galaxy J6,5.6,13990,02-01-2017

Enter mobile 2 detail:

#SM 45 JJ6-001,Galaxy J7,5.6,13990,02-01-2017

Mobile 1

Reference Id: #SM 45 JJ6-001

Model Name: Galaxy J6

Display Size: 5.6

Price: 13990.0

Launched Date: 02-01-2017

Mobile 2

Reference Id: #SM 45 JJ6-001

Model Name: Galaxy J7

Display Size: 5.6

Price: 13990.0

Launched Date: 02-01-2017

Mobile 1 and Mobile 2 are different

Question 5: Mobile Brand Requirement 3

Requirement 3:

In this requirement, you need to validate the referenceId of the Mobile.

a)Create a class **Main** with the following static methods:

Method Name

Description

static Boolean validateReferenceId(String referenceId)

Validate the referenceId based on the rules given below. Returns**true** if referenceId is valid else return **false**

b) While validating a referenceId follow the below rules.

1. The first part should start with '#' and then followed 2 to 3 UPPERCASE letters.
2. The second part contains a two digit number. Sometimes second part will be neglated.
3. Third part contains 2 to 6 UPPERCASE letters and numbers followed by a '-' and 2 to 4 digit number.
4. Each part is separated by space.

Valid Format:**#BA 45 CX-20**
#BA CX-20
#JIO PH201-20

Note: Print "**Reference Id is valid**" if referenceId is valid else print "**Reference Id is invalid**".
All the above print statements are present in the main method.

[All text in bold corresponds to input]
Sample Input and Output 1:

Enter the reference Id to be validated:
#RM 87 AAA-062
Reference Id is valid

Sample Input and Output 2:

Enter the reference Id to be validated:
#MT 57 X-067
Reference Id is invalid

Option 1

Google Forms