AirJio

"AirJio Broadband - Get the greatest broadband connection & enjoy the quickest."

The largest 5G network provider in India for consumers and companies is AirJio. The new 5G broadband from AirJio was launched with intriguing promotions. As a software consultant, help AirJio develop software with the ability to calculate the whole bill fee, including service charges.

**Component Specification: BroadbandRecharge**

|  |  |  |
| --- | --- | --- |
| **Type(Class)** | **Attributes** | **Methods** |
| **BroadbandRecharge** | String customerName  String mobileNumber  double planCharge  String paymentMode | Necessary Getters, setters, and constructors are provided as part of the code skeleton. |

**Functional Requirement 1:** **Extract the details of BroadbandRecharge and create an object of BroadbandRecharge Class**

|  |  |  |
| --- | --- | --- |
| **Type(Class)** | **Attributes** | **Responsibilities** |
| **UserInterface** | public static BroadbandRecharge **extractDetails**(String rechargeDetails) | This method accepts **rechargeDetails**separated by colon as an argument and should extract the properties of the **BroadbandRecharge**from the argument by parsing the **rechargeDetails**. Set these values to the **BroadbandRecharge**object and return this object |

**Functional Requirement 2:** **Calculate the bill amount to be paid by the customer including the service charge**

|  |  |  |
| --- | --- | --- |
| **Type(Class)** | **Attributes** | **Responsibilities** |
| **BroadbandRecharge** | public double **calculateBillAmount**() | This method is used to calculate the bill amount to be paid by the customer including the service charge based on the paymentMode and return the same.  Kindly refer to the below tabular column for the paymentMode and their service charges respectively.  ***Condition****:*   * ***paymentMode****is case-insensitive.* * ***planCharge****should be greater than zero, else****return 0****.* * *If the****paymentMode****does not match the below tabular column,****return 0.*** |

|  |  |
| --- | --- |
| **paymentMode** | **serviceCharge (%)** |
| UPI  Card  NetBanking  AJWallet | 5%  3%  2%  Nil |

**Formula to calculate the bill amount to be paid:**

**Bill Amount = planCharge + (planCharge\* service charge percentage)/100**

**Example**

**Jose:9954645878:999:UPI**

Let paymentMode be UPI and planCharge be 999, then

BillAmount = 999+(999 \* 5)/100

BillAmount = 1048.95

**The main method is excluded from the evaluation. You are free to write your own code or add lines of code to check the correctness of the functionalities**

**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/Output -1**

Enter the details

**Jose:9954645878:999:UPI**

Invoice

Customer Name: Jose

Mobile Number: 9954645878

Plan: 999.0

Payment Mode: UPI

Bill Amount: 1048.95

**Sample Input/Output -2**

Enter the details

**JoeBiden:9548764944:788:AJWallet**

Invoice

Customer Name: JoeBiden

Mobile Number: 9548764944

Plan: 788.0

Payment Mode: AJWallet

Bill Amount: 788.0

**Sample Input / Output -3**

Enter the details

**Franklin:9000078888:999:Cash**

Invalid broadband recharge details

**Sample Input / Output -4**

Enter the details

**Franklin:9000078888:-999:AJWallet**

Invalid broadband recharge details