**Car-Service Management System** **- Requirement 4**

**Requirement 4:**

1. Create a Booking Class with the following attributes:

|  |  |
| --- | --- |
| **Member Field Name** | **Type** |
| bookingId | Long |
| dateTimeOfService | Date(java.util) |
| paymentMode | String |
| customer | Customer |
| car | Car |
| amount | Double |
| serviceEngineer | String |

Create / generate appropriate Getters & Setters and constructors.  
Create Classes Car and Customer as given in the previous requirement. While reading the input, only customerid and car license number is provided in the input. You need to create customer and car objects and assign only these values. Other details about customer and car can be safely ignored. (Already given in template code)

1. Create an abstract Class **PaymentMode** with the following attributes:

|  |  |
| --- | --- |
| **Member Field Name** | **Type** |
| type | String |

Include a single argument constructor with patameters PaymentMode(String type)  
  
c.  Create a Class CreditCardPayment which extends **PaymentMode** class with the following attributes:

|  |  |
| --- | --- |
| **Member Field Name** | **Type** |
| creditcardNumber | String |
| holderName | String |
| cardNumber | String |
| dateOfExpiry | Date |

Include a 5-argument constructor with patameters CreditCardPayment(String creditcardNumber, String holderName, String cardNumber, Date dateOfExpiry, String type)  
  
d. Create a Class WalletPayment which extends **PaymentMode** class with the following attributes:

|  |  |
| --- | --- |
| **Member Field Name** | **Type** |
| walletNumber | String |

Include a 2-argument constructor with patameters WalletPayment(String walletNumber, String type)  
  
e. Mark the access modifiers appropriately, and create constructors using super keyword. Include getters and setters for all the classes.  
  
f. Create an **abstract** method **makePayment(Booking booking)** in **PaymentMode**class which takes a booking object as parameter and returns the payment in Rupees as Double. Calculate the total amount with additional cost or discount as per the payment mode and return the value. Override the makePayment method inCreditCardPayment and WalletPayment. Round off the final amount to zero decimal values.

|  |  |
| --- | --- |
| **PaymentMode** | **Cost(Rs)** |
| CreditCardPayment | 2% additional cost |
| WalletPayment | 5% discount |

**Sample Input & Output 1:**

bookingId

**1**

dateTimeOfService

**12-04-2016**

paymentMode

**creditcardpayment**

customer id

**1**

licence number

**MH1420110062821**

amount

**1000**

service engineer

**subash**

creditcard number

**1546 2563 5896 5879**

holder name

**krishna**

card number

**123**

date of expiry

**12-04-2018**

Cost is Rs 1020

**Sample Input & Output 2:**

booking id

**2**

date time of service

**11-04-2016**

payment mode

**walletpayment**

customer id

**1**

licence number

**MH1420110062821**

amount

**3000**

service engineer

**allwin**

wallet number

**128975**

Cost is Rs 2850