Câu 1

**Edit: Design and code a class name DessertIterm that holds information of a DessertIterm**

**Design and code a deringving class name Candy from DessertIterm that holds information about Candy**

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| --- |
| **DessertIterm** |
| *String Name;* |
| *DessertIterm( String Xname)* |

|  |
| --- |
| **Candy** |
| *double Price double;*  *double Weight;* |
| ***Candy****( String Xname, double Xprice, double Xweight)*  **double getCode()** |

**Constructers to set value for instance variables.**

**double getCode-use to determine its cost, cost=price\*weight**

**Test Case**

*Enter dessert name: Whilte Chocolate Fudge*

*Enter candy price: 1.04*

*Enter candy weight: 2*

*Enter TC: 2*

*OUTPUT:*

*11.440000000000001*

*…………………………………………………*

*Enter dessert name: Chocolate Fudge*

*Enter candy price: 1.04*

*Enter candy weight: 2*

*Enter TC: 1*

*OUTPUT:*

*Chocolate Fudge*

*Chocolate Fudge 1.04 2.0*

Câu 2.

Edit:

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| Iinvoice (interface)-do not editk |
| + String f1(ArrayList<invoice a, int st>;  ++ int f2(ArrayList<invoice a); |

|  |
| --- |
| Invoice |
| - String Name  - int Total amount; |
| -Invoice(String Name, int Totalamount) |

|  |
| --- |
| **MyInvoice** |
| + String f1(ArrayList<invoice a, int st>  **+** **int f2(ArrayList<invoice at>**    f2(ArrayList<invoice a) |

**+**

**Constructers to set value for instance variables.**

**String f1(ArrayList<invoice a, int st>-if st=1, firstly, sort the list of invoices by customer name, finally, return customer name of second invoice in the list “a”.**

**if st=2, firstly, sort the list of invoices by total amount , finally, return total amount of second invoice in the list “a”.**

**int f2(ArrayList<invoice a> : set x the first highest amount of invoice and y is the second amount of invoice;remove all invoice wich have the amount of invoice equals to amount of x and y in the list “a”, finally caculate and return the sum of amount of all ather invoice in the list a;**

*Enter number of Invoice: 4*

*Issue to customer: Obama*

*Total amount: 96*

*Issue to customer: Putin*

*Total amount: 77*

*Issue to customer: i Jinping*

*Total amount: 96*

*Issue to customer: Trump*

*Total amount: 100*

*Enter test function (1-f1;2-f2): 1*

*st=1*

*OUTPUT:*

*Putin*

*Enter number of Invoice: 4*

*Issue to customer: Obama*

*Total amount: 96*

*kIssue to customer: Putin*

*Total amount: 77*

*Issue to customer: Xi Jinping*

*Total amount: 96*

*Issue to customer: Trump*

*Total amount: 100*

*Enter test function (1-f1;2-f2): 1*

*st=2*

*OUTPUT:*

*Obama*

*Enter number of Invoice: 4*

*Issue to customer: Obama*

*Total amount: 96*

*Issue to customer: Putin*

*Total amount: 77*

*Issue to customer: Xi Jinping*

*Total amount: 96*

*Issue to customer: Trump*

*Total amount: 100*

*Enter test function (1-f1;2-f2): 2*

*st=1*

*OUTPUT:*

*77*

Câu 3. Design and code a class named MyCard that holds information of a payment card, including:

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| MyCard |
| *String cardNumber;*  *String type;;* |
| *DessertIterm( String cardNumber, String type:)* |

* Constructor to set values for instance variablee. Make sure that a valid payment card number is a string which constains digits only, reset payment card number to a string of “0000” (4(four) digits 0f 0) if payment card number is not valid.
* Add need operations to the class and complete below method which is declared in MyCard class, the function will be used in the second tesst case.

+ String getCardCode()- assuming that length of payment card is greater than 4 this function return value of card code as the rule:

* Card code= first 4 didits of payment card number if type of card is “credit”.
* Atherwise card code= lasst 4 didits of payment card number

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