NAME:K.KARTHIKA

ROLL NO:15L124

DEPT:ECE-'A'

**************************JAVA PROGRAMMING*************************************

TASK→4

PROGRAM:

//IMPLEMENTATION OF CLASS AND OBJECTS

Item.java

SOURCE CODE:

```java
public class Item {
    String id;
    String name;
    double maximumRetailPrice;
    float discountPercent;
    double discountPrice;
    double netPrice;
    int quantity;
    String manufactureDate;
    String expiryDate;
    void calculateDiscountPrice() {
        discountPrice = (maximumRetailPrice * quantity) - (maximumRetailPrice *
(discountPercent / 100));
    }
    void print(){
        System.out.println("\n      -----------ITEM DETAILS-----------");
        System.out.printf("\nID"+"%35s", id);
        System.out.printf("\nNAME"+"%38s", name);
        System.out.printf("\nMAXIMUM RETAIL PRICE"+"%22s",("Rs." +
maximumRetailPrice));
        System.out.printf("\nDISCOUNT PERCENT"+"%21s", discountPercent + "%");
        System.out.printf("\nQUANTITY"+"%26s", quantity);
        System.out.printf("\nMANUFACTURE DATE"+"%27s", manufactureDate);
        System.out.printf("\nEXPIRY DATE "+"%31s", expiryDate);
        System.out.printf("\nDISCOUNT PRICE"+"%39s",("Rs." + discountPrice));
        System.out.println();
    }
}
```

Solution.java

SOURCE CODE:

```java
public class Solution {
    public static void main(String[] args) {
        Item item;
        item = new Item();
        item.id="12AA";
        item.name="CHOCOLATE";
        item.maximumRetailPrice=395.59;
        item.discountPercent=4.5f;
        item.quantity=4;
        item.manufactureDate="20-10-2017";
        item.expiryDate="21-11-2018";
        item.calculateDiscountPrice();
        item.print();

        Item item1;
        item1 = new Item();
        item1.id="16FI";
        item1.name="ICE CREAM";
        item1.maximumRetailPrice=250.25;
        item1.discountPercent=10.2f;
        item1.quantity=6;
        item1.manufactureDate="18-10-2018";
        item1.expiryDate="22-12-2019";
        item1.calculateDiscountPrice();
        item1.print();
    }
}
```

OUTPUT:

```
C:\Users\students\Documents\karthi>javac Item.java

C:\Users\students\Documents\karthi>javac Solution.java

C:\Users\students\Documents\karthi>java Solution

      ------------ITEM DETAILS------------

ID                          12AA
NAME                        CHOCOLATE
MAXIMUM RETAIL PRICE        Rs.395.59
DISCOUNT PERCENT            4.5%
QUANTITY                    4
MANUFACTURE DATE            20-10-2017
EXPIRY DATE                 21-11-2018
DISCOUNT PRICE              Rs.1564.5584492926298

      ------------ITEM DETAILS------------

ID                          16FI
NAME                        ICE CREAM
MAXIMUM RETAIL PRICE        Rs.250.25
DISCOUNT PERCENT            10.2%
QUANTITY                    6
MANUFACTURE DATE            18-10-2018
EXPIRY DATE                 22-12-2019
DISCOUNT PRICE              Rs.1475.974500477314

C:\Users\students\Documents\karthi>
```