Name – NITIN AGRAHARI

Reg ID- 12108480

Test Name- Test Vagrant

Email ID – nitinagrahari982gmail.com

```java
import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

import java.time.LocalDate;

import java.time.LocalTime;

import java.time.OffsetDateTime;

import java.time.ZoneId;

import java.util.ArrayList;

import java.util.Arrays;

import java.util.Collections;

import java.util.HashMap;

import java.util.HashSet;

import java.util.List;


public class Main {



public static void main(String[] arg) throws IOException

{


        double amount= 0;

        double maxGST =Integer.MIN_VALUE;

        Item maxGstItem = null;


        Item item1= new Item(  "Leather wallet",  1,  18,1100) ;
```

```java
Item item2 = new Item( "Umbrella",  2, 12,  900) ;

Item item3 = new Item ( "Cigeratte",  3,  28, 200) ;

Item item4 = new Item(  "Honey",  4, 0, 100) ;

List<Item> listofItems = new ArrayList<>();

listofItems.add (item1) ;

listofItems.add(item2);

listofItems.add (item3) ;

listofItems.add(item4);

ShoppingCart shoppingCart = new ShoppingCart (listofItems) ;



for (Item item: shoppingCart.itemList)

{

double cost      = item.getPrice()*item.getQuantity()+item.getGst();

if(item.getPrice()>500)

        cost= cost*0.95;

amount += cost;

if(item.getGst ()>maxGST)

{

maxGST = item.getGst () ;

maxGstItem = item;

}

}

System.out.println("Total amount to be paid:" + amount) ;

System.out.println("Maximum gst is paid for item :" + maxGstItem.getName()) ;
```

```java
        }
}
class Item{
        public Item(String name, int quantity, float gstRate, float price) {
                super();
                this.name = name;
                this.quantity = quantity;
                this.price = price;
                this.gst = (price*quantity)*gstRate/100;
        }
        String name;
        int quantity;
        float price;
        float gst;
        public String getName() {
                return name;
        }
        public int getQuantity() {
                return quantity;
        }
        public float getPrice() {
                return price;
        }
        public float getGst() {
                return gst;
        }
}


class ShoppingCart{
        List<Item> itemList = new ArrayList<>();


        public ShoppingCart(List<Item> itemList) {
```

```
        this.itemList = itemList;

    }


}
```