

# Lab 11 Solution

## Exercise 1

```
class BurgerShop {
private int chickenBurger;
private int beefBurger;
private int cheeseBurger;
private double discount;
private double subtotal;
private double total;

public BurgerShop()
{
    chickenBurger =0;
    beefBurger = 0;
    cheeseBurger = 0;
    discount = 0.0;
    subtotal = 0.0;
    total = 0.0;
}

public int getChickenBurger() {
    return chickenBurger;
}

public void setChickenBurger(int chickenBurger) {
    this.chickenBurger = chickenBurger;
}

public int getBeefBurger() {
    return beefBurger;
}

public void setBeefBurger(int beefBurger) {
    this.beefBurger = beefBurger;
}

public int getCheeseBurger() {
    return cheeseBurger;
}

public void setCheeseBurger(int cheeseBurger) {
    this.cheeseBurger = cheeseBurger;
}
```

```

}

public double getDiscount() {
    return discount;
}

public void setDiscount(double discount) {
    this.discount = discount;
}

public void calculateSubtotal()
{
    subtotal = chickenBurger*10.5+beefBurger*6.0+cheeseBurger*2.5;

}

public void calculateTotal()
{
    total= subtotal-((discount/100)*subtotal);

}

public void Display()
{
    calculateSubtotal();// in case if display method called without
calling these methods in main
    calculateTotal();

    System.out.println("-----");
    System.out.println("Item          Quantity          Price");
    System.out.println("Chicken Burger    "+chickenBurger+"
SR"+(chickenBurger*10.5));

    System.out.println("Beef Burger      "+beefBurger+"
SR"+(beefBurger*6.0));

    System.out.println("Cheese Burger    "+cheeseBurger+"
SR"+(cheeseBurger*2.5));

    System.out.println("-----");
    System.out.println("Sub total          SR
"+subtotal);
    System.out.println("Discount (%"+discount+"
SR "+((discount/100)*subtotal));
    System.out.println("-----");
    System.out.println("Total              SR
"+total);
}
}

```

```

public class TestBurgerShop {

    /**
     * @param args
     */
    public static void main(String[] args) {
        // TODO Auto-generated method stub

        BurgerShop bs = new BurgerShop();
        bs.setChickenBurger(8);
        bs.setBeefBurger(4);
        bs.setCheeseBurger(4);
        bs.setDiscount(10);
        bs.calculateSubtotal();
        bs.calculateTotal();
        bs.Display();

    }

}

```

Exercise 2

```

class BurgerShop {
    private int chickenBurger;
    private int beefBurger;
    private int cheeseBurger;
    private double discount;
    private double subtotal;
    private double total;

    public BurgerShop()
    {
        chickenBurger = 0;
        beefBurger = 0;
        cheeseBurger = 0;
        discount = 0.0;
        subtotal = 0.0;
        total = 0.0;
    }

    public int getChickenBurger() {
        return chickenBurger;
    }

    public void setChickenBurger(int chickenBurger) {
        this.chickenBurger = chickenBurger;
    }
}

```

```

public int getBeefBurger() {
    return beefBurger;
}

public void setBeefBurger(int beefBurger) {
    this.beefBurger = beefBurger;
}

public int getCheeseBurger() {
    return cheeseBurger;
}

public void setCheeseBurger(int cheeseBurger) {
    this.cheeseBurger = cheeseBurger;
}

public void calculateDiscount()
{
    if(subtotal>200)
        discount=20;
    else if(subtotal>150)
        discount=18;
    else if(subtotal>100)
        discount=15;
}

public void calculateSubtotal()
{
    subtotal = chickenBurger*10.5+beefBurger*6.0+cheeseBurger*2.5;
}

public void calculateTotal()
{
    total= subtotal-((discount/100)*subtotal);
}

public void Display()
{
    calculateSubtotal();// in case if display method called without
calling these methods in main
    calculateDiscount();
    calculateTotal();

    System.out.println("-----");
    System.out.println("Item          Quantity          Price");
    System.out.println("Chicken Burger    "+chickenBurger+"
SR"+(chickenBurger*10.5));

```

```

        System.out.println("Beef Burger          "+beefBurger+"
SR"+(beefBurger*6.0));

        System.out.println("Cheese Burger          "+cheeseBurger+"
SR"+(cheeseBurger*2.5));

        System.out.println("-----
-----");
        System.out.println("Sub total                      SR
"+subtotal);
        System.out.println("Discount (%"+discount+"
SR  "+((discount/100)*subtotal));
        System.out.println("-----
-----");
        System.out.println("Total                      SR
"+total);
    }
}

```

```

public class TestBurgerShop {

    /**
     * @param args
     */
    public static void main(String[] args) {
        // TODO Auto-generated method stub

        BurgerShop bs = new BurgerShop();
        bs.setChickenBurger(8);
        bs.setBeefBurger(4);
        bs.setCheeseBurger(4);
        bs.calculateSubtotal();
        bs.calculateDiscount();
        bs.calculateTotal();
        bs.Display();

    }

}

```