

Name: Jay Lapani

Roll No. 21BCP150 Div3G5

```
import java.util.ArrayList;
import java.util.List;

class Canteen {
    private String name;
    private String Food;

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getFood() {
        return Food;
    }

    public void setFood(String Food) {
        this.Food = Food;
    }

    @Override
    public String toString(){
        return "Canteen\n Name : " + name + "\n Food
: " + Food;
    }
}

class Site implements Cloneable {
    private String canteenName;
    List<Canteen> fls = new ArrayList<>();
}
```

```

public String getcanteenName() {
    return canteenName;
}

public void setcanteenName(String canteenName) {
    this.canteenName = canteenName;
}

public List<Canteen> getCanteen() {
    return fls;
}

public void setCanteen(List<Canteen> fls) {
    this.fls = fls;
}

public void loadData() {
    for (int i = 1; i <= 5; i++) {
        Canteen f = new Canteen();
        f.setName("Canteen " + i);
        f.setFood("Food " + i);
        getCanteen().add(f);
    }
}

@Override
public String toString() {
    return "Canteen\n Canteen Name : " +
canteenName + "\n Canteen : " + fls;
}

@Override
protected Site clone() throws
CloneNotSupportedException {
    Site s = new Site();
    for (Canteen f : this.getCanteen()) {
        s.getCanteen().add(f);
    }
}

```

```

        return s;
    }
}

public class PrototypeDP {
    public static void main(String[] args) throws
CloneNotSupportedException {
        Site s1 = new Site();
        s1.setcanteenName("Canteen - 1");
        s1.loadData();
        Site s2 = s1.clone();
        s1.getCanteen().remove(2);
        s2.setcanteenName("Canteen - 2");
        System.out.println(s1);
        System.out.println(s2);
    }
}

```

PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL

```

PS D:\DP> cd "d:\DP\" ; if ($?) { javac PrototypeDP.java } ; if ($?) { java PrototypeDP }
Canteen
Canteen Name : Canteen - 1
Name : Canteen 4
Food : Food 4, Canteen
Name : Canteen 5
Food : Food 5]
Canteen
Canteen Name : Canteen - 2
Canteen : [Canteen
Name : Canteen 1
Food : Food 1, Canteen
Name : Canteen 2
Food : Food 2, Canteen
Name : Canteen 3
Food : Food 3, Canteen
Name : Canteen 4
Food : Food 4, Canteen
Name : Canteen 5
Food : Food 5]
PS D:\DP>

```