

Lab 10

1. Write a generic method to merge the two sorted list into single sorted list. Change the given method to support any two types of Lists supports various types like String, Number, Person etc., After combining/merging you can use Collections.sort() to resort.

```
public static List<Integer> mergeSortedLists(List<Integer> list1,  
List<Integer> list2) {  
  
}
```

Refer the prob1 package for the startup code.

2. Generalize the contains method for any type of Collection like List, Queue, Set etc., and for the any type of Integer, String, Employees, Account and other types.

```
public class Main {  
    public static void main(String[] args) {  
        List<String> list = Arrays.asList("Bill", "Joe", "Tom");  
        boolean result = Main.contains1(list, "Joel");  
        System.out.println(result);  
    }  
    /*Create a new Generic method to support various Collection and  
type*/  
    public static boolean contains1(List<String> list, String s) {  
        //could return list.contains(s), but this does not generalize  
        if(list == null && s == null) return false;  
        for(String x: list) {  
            if(x.equals(s)) return true;  
        }  
        return false;  
    }  
}
```

Refer the startup code from prob2 package.