**­­CS 114 Assignment 7**

**Topic: Directory (4 points)**

**For each task, submit the source code with detail comments electronically.**

1. **Objective: Multiple Dictionaries for data structure (1 points)**

**Use UALdictionary.java to create two Dictionaries and allows user to access the employee record by Key of different dictionary. Value/content for the KVpair will be Staffmember object. The employee.txt is the input file that contains data records of all employee.**

1. **Dictionary 1: will use SSN field which is the fourth field of the data field on the record as Key.**
2. **Dictionary 2: will use Name field which is the first field of the data field on the record as Key.**

**Download StaffMember.java, UALdictionary.java, Alist.java, List.java, Dictionary.java, KVpair.java and employee.txt from Moodle.**

1. **Objective: Implement java.util.Comparator to determine the order/match of arbitrary objects. (1 points)**

**Write a java program to determine the order of two shape objects by comparing their area. For example: determine the order of**

1. **A 20x5 rectangular.**
2. **A circle with radius 6.**

**Allow user to input length & width for the rectangular and radius for the circle to test your program. Download Circle.java, Rectangular.java and Shape.java from Moodle.**

1. **Objective: Manage Dictionaries use Set & Map (2 points)**

**Use java.util.TreeSet; to implement Dictionary data structure to perform**

**verification of an employee for the company. The employee.txt contains data**

**records of all employee. Use the name which is the first field on each record**

**as the key for the dictionary to access the data structure to perform this**

**operation.**

**Allow user to enter name to search employee table to verify the employment**

**Status of employee.**