

Ojashwi College
BCA – 3rd Semester
OOP in Java

Lab 8: Collections

1. Create a class Card that contains Face (i.e., Ace, Deuce, Three, Four, Five, Six, Seven, Eight, Nine, Ten, Jack, Queen, and King) and Suit (i.e. Clubs, Diamonds, Hearts, and Spades). Write a program that creates a list of all cards found a deck and print them.
(Note: Face and Suit might be enum.)
2. Write a program that uses a String method split to tokenize a line of text input by the user and places each token in a TreeSet. Print the elements of the TreeSet. [Note: This should cause the elements to be printed in ascending sorted order.]
3. Create a class called School that contains its code, name, type (primary, secondary, +2, College, etc.), and district. Create a **Map** that contains the list of schools in a given districts, given that you are provided an array of schools. (i.e., Key – District, Value – List)

Eg: academia = new School (102, "Academia College", "College", "Lalitpur");

Map →

Lalitpur: academia, prasadi, united, gems

Kathmandu: prime, shankardev, ascol

Bhaktapur: khwapa

4. Write a program that contains the set of customers, which are sorted in order of age and name.
Eg:
Age, Name:
10, Ram
12, Hari
12, Shyam
13, Gopal
15, Ashish
15, Sweta
5. Create a class called sales transaction that includes details like name of person, date of purchase, name of item purchase, quantity and unit price. Create a linked list of the sales transactions, sort it in ascending order of date. Finally print the sorted array using iterator.