Practical exam SPRING 2020  
Subject: PRO192  
Duration: 90’  
Total: 10 marks

Create a Medical Management System. You have to create 3 classes:

1. Create a class named “**Medicine**”. It contains a field String name and constructors, getters, setters should be implemented in this class. **[1 mark]**
2. Create a class named **MedicineManager**. Using a HashMap<String, ArrayList<Medicine>> to map a disease name to list of Medicines

Some the methods should be implemented:

**The method void loadData(**): to read data from the given text file(**in.txt**) and store information in the map. **[3 marks]**

A text file **in.txt** like as: <<disease name@medicines>>

Flu@influenza, zanamivir, sildenafil

Headache@Tamiflu

Cold@Advil, influenza

Sore throat@risperidone

Muscle aches and pains@Viagra

Acne@ustekinumab, sildenafil

**The method void printDiseaseName(Medicine m):** print out the disease names which can be prevented by m to the text file (**out1.txt**). **[3 marks].**

Example: if medicine name of m =” influenza” then out1.txt is: Flu, Cold

**The method void printMedicine (String diseaseName):** Print out medicines names for given disease name to the text file (**out2.txt**). **[3 marks].** *Example: if disease name =”Flu” then out2.txt looks like:* influenza, zanamivir, sildenafil

1. A class named Tester to test the program. In the method main, you call three methods of the class **MedicalManager**.

**Note: You are required to submit the project which includes all files: in.txt, out1.txt, out2.txt and other files.**