**HL7 Retrieve Patient Information**

**Step 1 :**

**Open file from the path**

* Create File object with filename ‘messages.txt’
* Create Scanner object using File object created as input.
* Use ScannerObject.hasNext() method to read each line in file that begins with string “PID”

**Step 2 :**

Read lines that begin with “PID” & store them in ArrayList of String type

**Step 3 :**

For each line in ArrayList, split the string at “\\|” into an array of type String. This will give all the fields in PID lines.

Desired fields can be selected using array index.

e.g : if you need field 3 i.e. Patient ID, select array at index 2

**Step 4 :**

Process the array and fetch required fields for Patient Class.

Create a new method which will take array as an input.

This method will again use split logic to fetch First Name, Last Name, Suffix, Address etc (split on “^”)

Get the desired fields from array, and create a Patient Class Object for each Patient.

**Step 5 :**

Store Patient information in arrayList of type Patient class & display data on console

Convert this arrayList into an Array. Use toString() method on array to display the snapshot of each Patient Objects on Console.

**Step 6 :**

Write a txt file “patient-summary.txt” with Patient Information

**Patient Class**

1. Patient ID (String) – 3rd entry in PID line
2. Name (First, Last, Suffix) (three String fields) – 5th entry
3. DOB (Date) - 7
4. Sex(Char) - 8
5. Race (String) - 10
6. Address (Address Class type), Country Code – 11, 12
7. Phone Number – Home (String) – 13
8. Primary Language (String) - 15
9. Marital Status(Char) - 16
10. SSN Number (String) - 19
11. Patient Death Indicator (Char) - 30
12. Patient Death Date & Time(Date) - 29