Name: Date: Class

Patient is a class that has name, dateAdmitted and doctor as fields.

Patient
- name: String
- dateAdmitted: String
- doctor:String
+ Patient(n: String, date:String):
+ setDoctor(doc:String): void
+ getDoctor():String
+ getName(): String
+ toString(): String

PART 1: ARRAY OF OBJECT
1. (10 pts) Declare an array named **patients** large enough to hold 50 Patient objects.

2. (15 pts) Sam Wilson a patient of Dr. Jenny Jones was admitted today. Store this information as the first object in the **patients** array.

PART 2: ARRAYLIST OF OBJECTS
3. (10 pts) Define and instantiate an ArrayList named **patientList** of Patient objects.

4. (15 pts) Sam Wilson a patient of Dr. Jenny Jones was admitted today. Store this information as the first object in the **patientList.**

5. (30 pts) Several more patients have been admitted to the hospital. Drs. Kelvin Jenkins and James Williams also have patients admitted. Write code that will examine the **patientList** and print the number of patients of "Dr. Jenny Jones" in the **patientList**.

6. (10 pts) Write code that will print the <u>name</u> of the *last* patient in the **patientList** *arraylist.*

PART 3

7. (10 pts) Given an array of ints named **grades** and an **int** variable named **total** that has already been declared, write some code that places the sum of all the elements of the array **grades** into **total**. Then compute the *average* and display it. (You may declare additional variables)

BONUS: (5 pts) Given an ArrayList of Integer named **gradeList, di**splay the *highest* grade.