

# CIS 1.5 Fall 2008 Lab 2, Part 2

## Instructions

- This is the second part of the second homework/lab assignment for CIS 1.5. Read the first part of the assignment for complete instructions, due date and submission details.

### 1 Before you start

- Get the “make records” example from Professor Parsons (or if you are at home, download it from the class web page. It is one of the examples for Unit II).
- Make sure you can run the program.  
(0 points)

### 2 Creating and printing records

- Write a program that combines the functionality of the two example programs we looked at in class.
- First it should prompt the user to enter patient data, write this data to a file, and then close the file.
- Then it should print out all the data in the file.  
(1 point)
- Save your working program as **hw2-4.cpp**.

### 3 Allowing the user to choose what to do

- Modify the program so that the first thing that it does is to ask the user.

```
Enter 1 to create a new file of patient records
Enter 2 to print out patient records
```

If the user enters 1, the program asks for patient data and writes it to a file. If the user enters 2, the program just prints out all the data in the file.

(2 points)

- Save your working program as **hw2-5.cpp**.

### 4 Adding new options

- Modify the program to add two new options for the user.
- If the user enters 3, the program asks for a patient ID and displays the information for that patient.  
(1 point)
- If the user enters 4, the program asks for patient data and *adds it to the end of the existing file of patient data*

Hint: You can write data to the end of a file if you open it using, for example:

```
ofstream outfile(“patient.dat”, ios::app
```

(1 point)

- Save your working program as **hw2-6.cpp**.

## 5 Extra credit question

- Re-structure your program so that it has the following four methods: `printFile()` which is called when the user enters 1, `createFile`, which is called when the user enters 2, `locateRecord`, which is called when the user enters 3, and `addRecord`, which is called when the user enters 4.

*(1 point)*

- Save your working program as **hw2-7.cpp**.