



University of Central Punjab

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FACULTY OF INFORMATION TECHNOLOGY

Introduction to Database System Lab

01

**Section: Spring -
21**

Hospital Management System

Jinnah hospital wants to manage its record using file system. The software needs to store information regarding their Dentists, Patients, appointments, Nurses, procedures and costs.

- The hospital can have many dentists. Each Dentist will have an Id and name. Any dentist can perform procedure on any patient along with any Nurse based on her availability.
- A patient having id and name can make appointment from any dentist.
- A nurse can help any dentist in performing procedures in Operation Theater.

Following Table includes the information.

<u>DenId</u>	<u>DenName</u>	<u>PatNo</u>	<u>PatName</u>	<u>AppNo</u>	<u>AppDate</u>	<u>NurNo</u>	<u>NurName</u>	<u>Procedure</u>	<u>Cost</u>
D1	Smith	P1	Jones	A1	1/02/09	N1	Green	Filling	300
D1	Smith	P1	Jones	A2	1/03/09	N1	Green	Filling	300
D1	Smith	P2	Patel	A3	3/01/09	N2	Sarah	Canal	1000
D2	Barky	P3	Thom	A4	6/03/09	N3	Brown	Crown	700
D3	Thomas	P4	Ronnie	A5	8/06/09	N4	Cann	Filling	300
D4	Sam	P5	Emily	A6	9/07/09	N1	Green	Canal	1000
D2	Barky	P6	Sana	A7	8/07/09	N2	Sarah	Canal	1000

Task 1

Create the above-mentioned table into comma separated value file (HospRecord.txt) programmatically in C++.

Output should be in this format:

D1, Smith, p1, Jones, A1, 1/02/09,N1, Green, Filling,

300 D1, Smith, p1, Jones, A2, 1/03/09,N1, Green,

Filling, 300

Task 2

Now more patients have made appointments. So to manage new records. Insert the following record into file (HospRecord.csv) in append mode.

<u>DenId</u>	<u>DenName</u>	<u>PatNo</u>	<u>PatName</u>	<u>AppNo</u>	<u>AppDate</u>	<u>NurNo</u>	<u>NurName</u>	<u>Procedure</u>	<u>Cost</u>
D1	Smith	P1	Jones	A8	11/02/09	N3	Brown	Filling	300
D2	Barky	P7	Coral	A9	18/03/09	N1	Green	Canal	1000
D5	Bond	P8	Jonson	A10	31/01/09	N2	Sarah	Canal	1000

Task 3

Perform the following tasks.

- Patient name "Jonson" wants to cancel appointment with Dr. Bond and now he wants to consult Dr. Smith for filling procedure on 1/06/09.
- Dr. Smith has become Head of dental department so now he wants to increase his Filling procedure fee from 300 to

500. Output the updated record on console.

Task 4

Perform the following tasks.

- Patient name "Coral" is not satisfied with her Root Canal Procedure. She wants to consult another doctor in new hospital. So delete the complete record against Coral.
- Nurse name "Sarah" has left hospital due to her personal issues. Now delete the entire record in which Sarah is involved.

Output the updated record on console.

Task 5

Perform the following tasks.

- Hospital Management wants to know about clientage of Dr. Barky. How much patients have booked appointment with him. Print name of those patients who have booked appointment from Dr. Barky.
- Patient name "Jones" wants to see his Filling procedure record after date "3/02/09". Print the record on console accordingly.