

DB1

Faculty of information II

Exercise 2: SQL queries

Consider the following **Hospital** database schema with 7 relations.

Patient	<u>Pid</u>	name	age	address
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Doctor	<u>Did</u>	name	Department_id	Specialty
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Doc_availability	<u>Did</u>	<u>dayOfTheWeek</u>
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Admission	<u>pid</u>	Did	roomNumber	<u>Admission Date</u>	Duration_of_stay
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Department	<u>Department_id</u>	Department_name
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Nurse	<u>Nid</u>	name	<u>Department_id</u>
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Room	<u>roomNumber</u>	Department_id	capacity	CostPerDay
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Notes:

- The duration of stay in table **Admission** is in Days.
- The capacity in Room = the number of beds inside the room.

Write the following queries

- 1) Give all the pid and names of patients who live in *Beirut*
- 2) How many doctors work in the hospital?
- 3) Give all the doctor names who work in the *maternity* department.
- 4) Which department (id) has the maximum number of nurses?
- 5) Which patient(s) have stayed the longest in the hospital?
- 6) To which department is the patient “Karim Asmar” admitted to?
- 7) What does this query produce? `SELECT * FROM PATIENT NATURAL JOIN DOCTOR`
- 8) Output the departments who have more than 10 nurses.
- 9) What’s the output of this query?

```
SELECT did
FROM doc_availability
WHERE dayOfTheWeek='MONDAY' AND dayOfTheWeek='WEDNESDAY'
```

- 10) Give all the names of the doctors and their IDs for those who are specialized in any kind of cancer. For example, breast cancer, colon cancer... and so on.