## **Database Management Systems**

Year 2, Semester 1

2018



## Lab Sheet 05

Consider the following schema from the previous lab sheet.

- 1. Physician (eid, ename, position)
- 2. Department (did, name, head)

Foreign key (head) references Physician (eid)

3. Works\_in (physician, department)

Foreign key (physician) references Physician (eid) Foreign key (department) references Department (did)

- 4. Patient (pid, name, address, phone, insuranceId)
- 5. Appointments (appointmentId, patient, physician, startTime, endTime, room)

Foreign key (physician) references Physician (eid)

Foreign key (patient) references Patient (pid)

- 6. Drugs (Code, name, brand)
- 7. Prescribes (<u>physician</u>, <u>patient</u>, <u>drug</u>, <u>date</u>, appointment, dose)

Foreign key (physician) references Physician (eid)

Foreign key (patient) references Patient (pid)

Foreign key (drug) references Drugs (Code)

Answer the following questions with reference to the schema below. Use the given data set and check the correctness of your answers in the SQL Server.

1.	Write a T-SQL function to return the number of physicians in a given department.

2.	Write the command(s) you would use to print the number of physicians in the 'Psychiatry' using
	the function you have created in the previous question.
3.	Write a T-SQL function that returns the number of appointments a given physicians have on a
	given date.
4.	Write a T-SQL procedure that outputs number of drugs prescribed to a given patient by a given
	doctor.

Write the command(s) you would use to print the number of drugs prescribed by the physician
named 'Molly Clock' to patient named 'Dennis Doe' using the procedure you have created in
the previous question.
Write a procedure that outputs the patient with the maximum number of appointments with a
given physicians. Output the name of the patient and the number of appointments.