3612ICT Database Systems and Administration /7204ICT Database administration

MySQL stored programs

1) Create a database `hotelDB` and use the supplied script file to create tables and their content.

2) Make a trigger that enforces the rule below:

   For each booking, the checking date is less than the checkout date;

3) Make a stored procedure that books a room for a guest in Grosvenor Hotel: The input includes guest name, guest telephone number, address, checking date and checkout date, and type of room. We assume the guest name and tel can identify the guest. The program must check the availability of a room of the required type during the specified booking period, if not, it prompts "room not available!". Otherwise, it makes the booking for the guest using an available room. If the guest is a new guest, it must insert the guest into the guest table.

   Hint: to find one room of type 'S' which is available for the given checking and checkout dates in hotel 5, you can use

```
select roomNo
from room
where type = 'S' and hotelNo=5 and
roomNo not in (select roomNo from booking b
where checkOutDate > given_checkindate and checkinDate <
given_checkoutdate and hotelNo = 5) limit 1;
```

Try your procedure and trigger and make sure they work correctly.

SUBMISION

Complete all queries and tasks. Make sure you submit scripts (that contain the code that solves the tasks) and screen shots to provide **EVIDENCE THE TASKS IN THE LAB WERE COMPLETED**. Include this as part of a single submission file in PDF format.

Complement the submission with a

REFLECTIVE LABORATORY REPORT (in PDF format)

than **analyzes** the screen shots and illustrations from the evidence that you completed the lab and also **discusses** in your own words what was the lab about, what concepts you discovered, and what did you learn in this lab. The reflective report is an account of your learning experience. You should **evaluate** the usefulness of the lab.