CPS3740/ Spring 2019   Homework #1, Name:_____   Dr. Huang

A. Due date: **11:59pm on February 16, 2019**

B. **Late penalty: 10 points off per week after due date**. **The maximum score will be 60 after the answers are given.**

C. **No resubmission after receiving the score. You MUST completely test your assignments before the deadline.**

D. Please **implement** your answers in the database **CPS3740_2019S** on **imc.kean.edu** server.

E. You have to refer to tables – **Staff**, **Hotel**, **Room**, **Booking**, **Guest** in database **CPS3740** on **imc.kean.edu** server.

F. Your SQL answer should be "**CREATE view vHW1_#_xxxx as <u>SELECT …….</u>", where # is the question number, xxxx is your Kean email ID, and <u>SELECT …….</u> is your answer.**

G. Your **view name** and **table name** must be **EXACTLY** the same as the requirement.

H. Please view your answers online at http://imc.kean.edu/students.

I. If your SQL code is working, you don't need to write the SQL statements on the paper.

J. If the SQL code is **NOT** working, please write the **SQL statement** and the **result** on the back of this paper so you can get partial credits. You will receive **maximum 50%** of the point.

1. **(10 pts) Create a view vHW1_1_xxxx** listing the **first name**, **salary** for the **staff** who is **male** and **position is Manager**.

2. **(10 pts) Create a view vHW1_2_xxxx** listing the **last_name** and **position** for **staff** who has **'e'** in the **first_name** name. The output should be alphabetically **ordered from A to Z by the last_name**.

3. **(10 pts)** Create a view **vHW1_3_xxxx** listing the **number of female staff** working at city **London**.

4. **(10 pts)** Create a view **vHW1_4_xxxx** showing the unique **hotel name** and the **price** for the hotel that has the **most expensive** room among all the hotels and all room types.

5. **(10 pts)** Create a view **vHW1_5_xxxx** listing **staff first name, position and their manage first names** and **positions** for all **male staff**. The output header needs to distinguish between staff and manger.

6. **(10 pts)** Create a view **vHW1_6_xxxx** listing the branch **city** that has **at least two** staff working in the branch;

7. **(15 pts)** Create a view **vHW1_7_xxxx** listing the **guest name**, **number of days** and the **amount** each guest needs to pay to the hotels for their stays. Your result should not include any **unknown** value in the **dateto**. Your result should include **guest name**, **hotel name**, **number of days**, and **amount** to pay.

8. **(15 pts) Create a table Money_xxxx** with the following fields and constraints.
    - **mid: int primary key auto_increment, code varchar(50) unique, cid: int, type: char(1), amount: float, mydatetime: datetime, note: varchar(255)**
    - **All fields cannot have NULL** values, except note.
    - **mid** is the **primary key**, and the value should be **auto increment** by the DBMS.
    - **cid** is a **foreign key** references to the id field in **CPS3740.Customers** table.
    - **code** should be **unique.**
    - **sid** is a **foreign key** references to the id field in **CPS3740.Sources** table

9. **(10 pts) Please insert 4 transactions into** your money table with the following information.
    a. Use only cid=1 for the homework 1
    b. type – 'D': deposit, 'W': withdraw
    c. mydatetime – the date and time when you insert the record.
    d. note – "Manually inserted" for homework 1
    e. Insert two deposits and two withdraws.
    f. Amount - a negative number for the "W" (withdraw), and a positive number for "D" (deposit).
    g. The 4 transactions should have different codes.
    h. The balance (the sum of the amounts) should not be negative for any customer.