

Name: \_\_\_\_\_

- Due date: by 11:59pm on **April 21, 2018**
- Please write stored procedures and stored functions based on the **dreamhome** database.
- **You must create and test your programs on database CPS3740\_2018S at server imc.kean.edu.**
- Your program names must EXACTLY follow each question format. The program name is case sensitive.
- XXXX means your email ID in the test case examples.
- The test cases in each question provide as the testing SQL queries with the corresponding results. You should test your programs with different input values and make sure the results are correct.
- The title of your output should also match the test cases.

**1. Write a stored function named fHW2\_1\_XXXX (...) based on the Staff table. It should take two arguments branchno and gender, and it should meet the following 3 test cases.**

1A. _____ (5 points) If the given <b>gender</b> is not 'M' or 'F', please do not run the select query and your program should return the error message "No such gender: A ". "A" is the input gender. <b>mysql&gt; select fHW2_1_XXXX('B004','A') as output;</b>	<pre> +-----+   output   +-----+   No such gender:A   +-----+ </pre>
1B. _____ (10 points) If the gender is 'F' and the given <b>branchno</b> is in <b>Staff</b> table, please return the <b>maximum salary</b> of the female staff working at the given <b>branchno</b> . <b>mysql&gt; select fHW2_1_XXXX('B003','M') as output;</b>	<pre> Your output should clearly indicate male, branchno, and the minimum salary. +-----+   output   +-----+   Male min salary at B003 is: 18000   +-----+ </pre>
1C. _____ (10points) If the gender is 'M' and the given <b>branchno</b> is in <b>Staff</b> table, please return the <b>minimum salary</b> of the male staff working at the given <b>branchno</b> . <b>mysql&gt; select fHW2_1_XXXX('B003','F') as output;</b>	<pre> Your output should clearly indicate female, branchno, and the maximum salary. +-----+   output   +-----+   Female max salary at B003 is: 24000   +-----+ </pre>
1D. _____ (5 points) If the gender is 'F' or 'M', and the given <b>branchno</b> is not in the <b>Staff</b> table, please return a NULL value. <b>mysql&gt; select fHW2_1_XXXX('B009','M') as output;</b>	<pre> +-----+   output   +-----+   NULL   +-----+ </pre>

**2. (20 points) Write a stored procedure named pHW2\_2\_XXXX (...) based on the Hotel, Room and Booking tables. Your program should take one argument hotelname and it should meet the following 2 test cases.**

2A. _____ (10 points) If the given <b>hotel name</b> is in the <b>Hotel</b> table, please display <b>the room type, and the number of room booked for each room type</b> for the given <b>hotel name</b> . <b>mysql&gt; call pHW2_2_XXXX('Grosvenor');</b> <pre> +-----+   type   count   +-----+   double   2     family   1     single   2   +-----+ </pre>	2B. _____ (10 points) If the given <b>hotel name</b> is <b>empty or null</b> , please display an error message "invalid hotel name". <b>mysql&gt; call pHW2_2_XXXX(NULL);</b> <b>mysql&gt; call pHW2_2_XXXX('');</b> <pre> +-----+   message   +-----+   Please input a valid hotel name.   +-----+ </pre>
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3. (25 points) Write a **stored procedure** named **pHW2\_3\_XXXX (...)** based on the **Guest** table. It should take one IN argument **city** and have one OUT argument **result**. Your program should meet the following 3 test cases.

<p>3A. _____ (5 points) If the given <b>city</b> is empty or NULL, please display “Please input a valid city.”</p> <p><b>mysql&gt; call pHW2_3_XXXX(NULL,@result); select @result;</b>  <b>mysql&gt; call pHW2_3_XXXX(' ',@result); select @result;</b></p>	<pre>+-----+   @result   +-----+   Please input a valid city.   +-----+</pre>
<p>3B. _____ (10 points) If the given <b>city</b> is in the <b>Guest</b> table, please display guest <b>names</b> for all guests whose addresses has pattern matching the <b>given city</b>.</p> <p><b>mysql&gt; call pHW2_3_XXXX('London', @result); select @result;</b></p>	<pre>+-----+   @result   +-----+   John Kay, Mike Ritchie   +-----+</pre>
<p>3C. _____ (10 points) If the given <b>city</b> xyz is not in the <b>Guest</b> table, please display “NO people found for city: xyz”. DO NOT hardcode the city name in your output.</p> <p><b>mysql&gt; call pHW2_3_XXXX('xyz',@result); select @result;</b></p>	<p>Your output should clearly indicate the input city name.</p> <pre>+-----+   @result   +-----+   NO people found for city:xyz   +-----+</pre>

4. (25 points) Write a **stored function** named **fHW2\_4\_XXXX (...)** based on the **Guest** table. Your program should take one argument **city** and it should meet the following 3 test cases.

<p>4A. _____ (10 points) If the given <b>city</b> is in the <b>Guest</b> table, please return text with <b>names</b> for all guests whose address includes the <b>given city</b>.</p> <p><b>mysql&gt; select fHW2_4_XXXX('London') as output;</b></p> <pre>+-----+   output   +-----+   John Kay, Mike Ritchie   +-----+</pre>	<p>4B. _____ (10 points) If the given <b>city</b> is empty or NULL, please display “Please input a valid city.”</p> <p><b>mysql&gt; select fHW2_4_XXXX('') as output;</b>  <b>mysql&gt; select fHW2_4_XXXX(NULL) as output;</b></p> <pre>+-----+   output   +-----+   Please input a valid city.   +-----+</pre>
<p>4C. _____ (5 points) If the given <b>city</b> is not in the <b>Guest</b> table, please display “No result found”.</p> <p><b>mysql&gt; select fHW2_4_XXXX('Union') as output;</b></p> <pre>+-----+   output   +-----+   No result found   +-----+</pre>	