CIS 353 Assignment#02 Deadline: October 06, 2024, 11:59PM

Write and Execute the SQL query (DDL/DML) for EACH of the following tasks (100 points = creating the three tables and inserting data=10 ; executing the query =15\*6)

**Submission guideline:**

**For each question, you should submit a screen-shot of your answer containing two things:**

* **The sql query**
* **The output when you run the query**

Write query to:

1. **Create ‘Employee’ table having following attributes and the constraints:**
   * **name** with max-length of 20 chars
   * **email** with max-length of 40 chars. (primary key)
   * **phone** with fixed-length of 5 digits/characters
   * **height** with max 4 digits, 2 allowed after the decimal
   * **weight** with max 5 digits, 2 allowed after the decimal
   * **age** having integer data-type
   * **zip** having integer data-type
   * **stateCode** fixed-size of length 2 /\* for example: use code MI for Michigan\*/

Insert the following tuples in the table (using the insert into statement):

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **NAME** | **EMAIL** | **PHONE** | **HEIGHT** | **WEIGHT** | **AGE** | **ZIP** | **STATECODE** |
| a | e[a@gvsu.edu](mailto:a@gvsu.edu) | 11111 | 5.8 | 160.5 | 19 | 78235 | MI |
| b | eb@gvsu.edu | 22222 | 6.8 | 260.59 | 26 | 49401 | MI |
| c | e[c@gvsu.edu](mailto:c@gvsu.edu) | 33333 | 5.4 | 130.25 | 22 | 49401 | CA |
| d | ed@gvsu.edu | 44444 | 6.2 | 170.53 | 25 | 22873 | IN |
| e | e[e@gvsu.edu](mailto:e@gvsu.edu) | 55555 | 5 | 300.53 | 25 | 89234 | NY |
| f | e[f@gvsu.edu](mailto:f@gvsu.edu) | 66666 | 4.8 | 163.35 | 22 | 49401 | FL |
| e | eee@gvsu.edu | 77777 | 5.5 | 150.8 | 21 | 34729 | IL |
| c | ecc@gvsu.edu | 88888 | 6.1 | 230.75 | 19 | 78019 | CA |
| b | ebb@gvsu.edu | 99999 | 4.2 | 225.66 | 24 | 23541 | NY |
| e | eej@gvsu.edu | 91919 | 5.8 | 200.5 | 26 | 67594 | WA |
| k | e[k@gvsu.edu](mailto:k@gvsu.edu) | 12122 | 6.5 | 190.9 | 25 | 45333 | MI |

1. Update the ages of all the persons living in zipcode 49401 to 40.
2. Set the statecode to ‘TX’ for all the persons with a zipcode 22873.
3. Display only the employees’ names, their emails and age information whose phone number ends with a ‘9’
4. Find the names, statecode of employees who share the same name but live in different states.
5. Find the names of employees whose zipcode is less than 1000 times of their age.
6. Find the names of employees from 49401 zipcode and having weight either less than 130 lb or greater than 250 lb.
7. Update the weight of the person named ‘f’ to 1000 lb.

**2. Create ‘customers’ table with the following attributes and constraints:**

– **name** with max-length of 20 chars;   
– **email** with max-length of 40 chars; this field should not be null. this field is the primary-key  
– **phone** with exact 5 digits; this field should be unique.

**- age** integer; customers must be at least 18 years old

– **zip** integer.  
– **stateCode** fixed-size of length 2

Populate the table with the following data:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **NAME** | **EMAIL** | **PHONE** | **AGE** | **ZIP** |  | **STATECODE** |
| r | cr@gvsu.edu | 11111 | 19 | 78235 |  | MI |
| t | ct@gvsu.edu | 22222 | 21 | 19034 |  | MI |
| d | cd@gvsu.edu | 33333 | 22 | 59583 |  | CA |
| g | cg@gvsu.edu | 44444 | 25 | 22873 |  | IN |
| w | cw@gvsu.edu | 55555 | 25 | 89234 |  | NY |
| a | ca@gvsu.edu | 66666 | 22 | 67012 |  | FL |
| j | cj@gvsu.edu | 77777 | 21 | 34729 |  | IL |
| h | ch@gvsu.edu | 88888 | 19 | 78019 |  | CA |
| i | ci@gvsu.edu | 99999 | 21 | 23541 |  | NY |
| c | cc@gvsu.edu | 91919 | 23 | 67594 |  | MI |
| k | ck@gvsu.edu | 12122 | 25 | 45333 |  | MI |
| m | cm@gvsu.edu | 12322 | 25 | 45133 |  | VA |
| p | cp@gvsu.edu | 32122 | 23 | 45343 |  | VA |

3. **Create ‘orders’ table with the following attributes and constraints:**

– **orderID** having integer data-type; this field is the primary key.

– **customerEmail** with max-length of 20 chars; this is a foreign-key referencing to the **customer email** from the customers table.

– **employeeEmail** with max-length of 20 chars; this is a foreign-key referencing to the **employee email** from the employee table.

– **productIDs** with max-length of 100 chars; set default to 'Carty is Empty' string.

– **orderCost** with max 8 digits, 2 allowed after the decimal; set default to zero.

– **ordertime** to store the date when the order was created.

Populate the table with the following data:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ORDERID** | **CUSTOMERNAME** | **EMPLOYEENAME** | **productIDs** | **orderCost** | **ORDERTIME** |
| 1 | a | b | 1,2,3,4 | 2160.5 | 23-Apr-21 |
| 2 | t | c | 2,3,4 | 1260.59 | 2-Apr-20 |
| 3 | c | d | 1,6,7 | 1130.25 | 13-Oct-20 |
| 4 | k | i | 2 | 170.53 | 28-Feb-24 |
| 5 | a | f | 6,7 | 3002.53 | 23-Nov-23 |
| 6 | g | g | 5,4,7 | 1653.35 | 3-Jun-23 |
| 7 | g | h | 2,3,6,8 | 1050.8 | 15-Dec-21 |
| 8 | h | i | 1,9 | 230.75 | 22-May-21 |
| 9 | a | f | 3,4,7 | 2251.66 | 12-Jan-24 |
| 10 | j | k | 4,5 | 800.5 | 2-Sep-21 |
| 11 | k | i | 1,6,5 | 190.9 | 19-Jun-22 |
| 12 | j | k | 3,5,7 | 1200.0 | 2-Aug-21 |

1. Display all the customer data in **ascending** order of their weight.
2. What is the maximum orderCost for all the orders?
3. How many orders were placed by customer ‘g’?
4. What is the total cost of all those orders placed by customer ‘a’?
5. List all the orders placed by customers from Michigan.
6. Find the names of the customers who ordered product id 6.
7. Display all the order details where the customer and the employee who served the customer share the same name.
8. Display all the order details of orders placed in the year of 2021.

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