**ITS 26000 – Applied Database Tech**

**Lab 12 – (100 points)**

**Use SQL to complete the following exercises.**

### **KimTay Pet Supplies:**

* 1. During class time, we run the following statement:

Graphical user interface, table

Description automatically generated

Graphical user interface, table

Description automatically generated

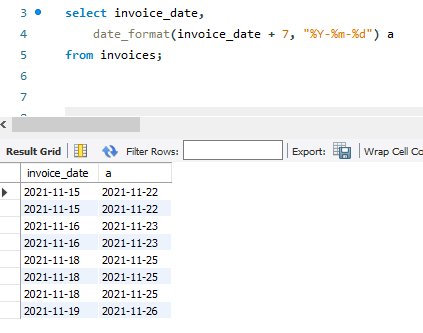
You can see that “Invoice\_date+7”’s return values are displayed in the format “YYYYMMDD” where “YYYY” is the year, “MM” is the month, and “DD” is the day. Could you change the displaying format of “Invoice\_date+7” in the same format as “Invoice\_date”, which is “YYYY-MM-DD”?

Please write your statement and paste screenshot.  (10 points)

select invoice\_date,

date\_format(invoice\_date + 7, "%Y-%m-%d") a

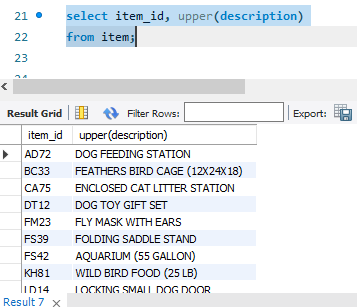
from invoices;



* 1. List the item ID and description for all items. The descriptions should appear in uppercase letters. (5 points)

select item\_id, upper(description)

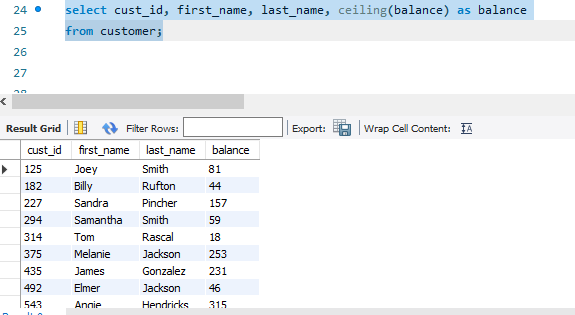
from item;



* 1. List the customer ID, first and last names, and balance for all customers. The balance should be rounded to the nearest dollar. (5 points)

select cust\_id, first\_name, last\_name, ceiling(balance) as balance

from customer;

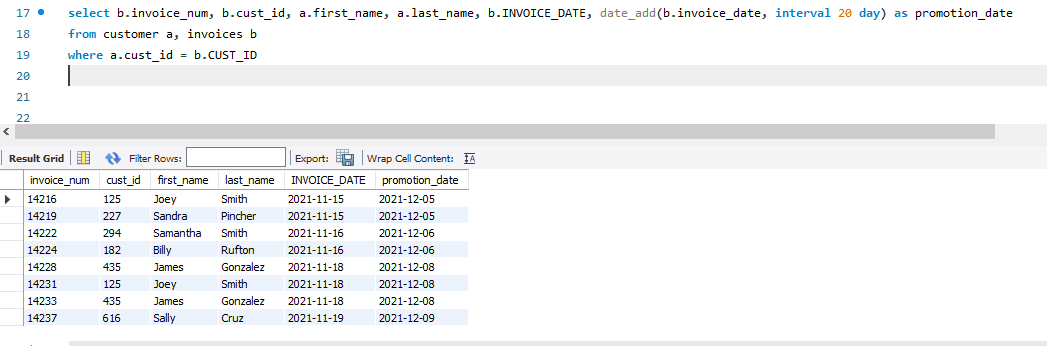


* 1. KimTay Pet Supplies is running a promotion that is valid for up to 20 days after an order is placed. List the invoice number, customer ID, customer first and last names, and the promotion date for each invoice. The promotion date is 20 days after the invoice was placed. (10 points)

select b.invoice\_num, b.cust\_id, a.first\_name, a.last\_name, b.INVOICE\_DATE, date\_add(b.invoice\_date, interval 20 day) as promotion\_date

from customer a, invoices b

where a.cust\_id = b.CUST\_ID



* 1. Write MySQL, PL/SQL, or T-SQL procedures to accomplish the following task:

Obtain the name and credit limit of the customer whose ID currently is stored in I\_CUST\_ID. Place these values in the variables I\_CUSTOMER\_NAME and I\_CREDIT\_LIMIT, respectively. Output the contents of I\_CUSTOMER\_NAME and I\_CREDIT\_LIMIT. (15 points)

delimiter //

create procedure e(in i\_cust\_id varchar(3),

out i\_customer\_name varchar(41),

out i\_credit\_limit decimal(7,2))

begin

select concat(first\_name, " ", last\_name), credit\_limit

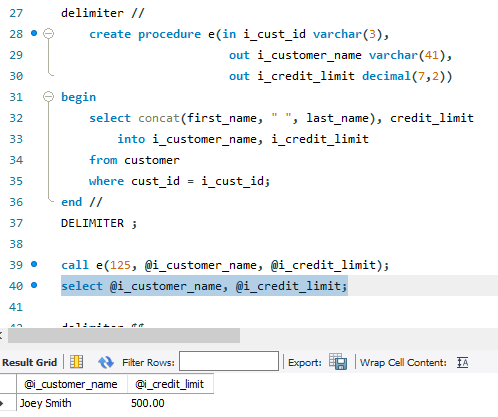
into i\_customer\_name, i\_credit\_limit

from customer

where cust\_id = i\_cust\_id;

end //

DELIMITER ;



* 1. Write MySQL, PL/SQL, or T-SQL procedures to accomplish the following task:

Obtain the invoice date, customer ID, and first and last names for the invoice whose number currently is stored in I\_INVOICE\_NUM. Place these values in the variables I\_INVOICE\_DATE, I\_CUST\_ID, and I\_CUST\_NAME, respectively. Output the contents of I\_INVOICE\_DATE, I\_CUST\_ID, and I\_CUST\_NAME. (15 points)

delimiter \*

create procedure f(in i\_invoice\_num char(5), out i\_invoice\_date date, out i\_cust\_id varchar(3), out i\_cust\_name varchar(41))

begin

select a.invoice\_date, b.cust\_id, concat(first\_name, " ", last\_name)

into i\_invoice\_date, i\_cust\_id, i\_cust\_name

from invoices a, customer b

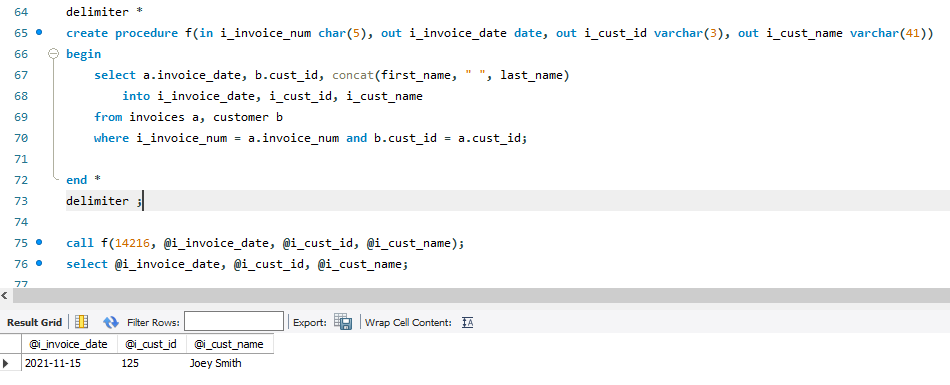
where i\_invoice\_num = a.invoice\_num and b.cust\_id = a.cust\_id;

end \*

delimiter ;

call f(14216, @i\_invoice\_date, @i\_cust\_id, @i\_cust\_name);

select @i\_invoice\_date, @i\_cust\_id, @i\_cust\_name;

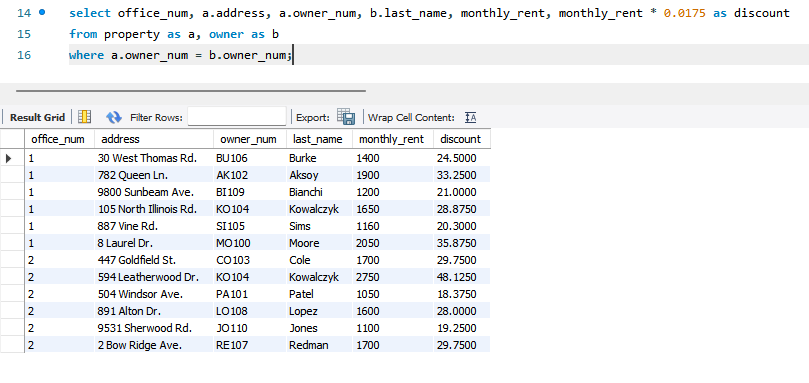


1. **StayWell Student Accommodation:**
   1. StayWell is offering a monthly discount for residents who pay their rent on a quarterly basis. The discount is 1.75 percent of the monthly fee. For each property, list the office number, address, owner number, owner’s last name, monthly rent, and discount. The discount should be rounded to the nearest dollar. (10 points)

select office\_num, a.address, a.owner\_num, b.last\_name, monthly\_rent, monthly\_rent \* 0.0175 as discount

from property as a, owner as b

where a.owner\_num = b.owner\_num;



* 1. Write PL/SQL or T-SQL procedures to accomplish the following task:

Obtain the first name and last name of the owner whose number currently is stored in I\_OWNER\_NUM. Place these values in the variables I\_FIRST\_NAME and I\_LAST\_NAME. Output the contents of I\_OWNER\_NUM, I\_FIRST\_NAME, and I\_LAST\_NAME. (15 points)

delimiter //

create procedure b(in i\_owner\_num char(5), out i\_first\_name varchar(20), out i\_last\_name varchar(20))

begin

select first\_name, last\_name

into i\_first\_name, i\_last\_name

from owner

where owner\_num = i\_owner\_num;

end //

delimiter ;

텍스트이(가) 표시된 사진

자동 생성된 설명

call b('AK102', @i\_first\_name, @i\_last\_name);

select @i\_first\_name, @i\_last\_name;

텍스트이(가) 표시된 사진

자동 생성된 설명

* 1. Write PL/SQL or T-SQL procedures to accomplish the following task:

Obtain the office number, address, owner number, owner first name, and owner last name for the property whose property ID is currently stored in I\_PROPERTY\_ID. Place these values in the variables I\_LOCATION\_NUM, I\_ADDRESS, I\_OWNER\_NUM, I\_FIRST\_NAME, and I\_LAST\_NAME, respectively. Output the contents of I\_PROPERTY\_ID, I\_ADDRESS, I\_OWNER\_NUM, I\_FIRST\_NAME, and I\_LAST\_NAME. (15 points)

텍스트이(가) 표시된 사진

자동 생성된 설명



텍스트이(가) 표시된 사진

자동 생성된 설명

**Deliverables**: Document Report with the SQL statement/Query and snapshot of query, its execution and results. Either word or pdf file need to be uploaded into Brightspace in one submission