

Assignment 3



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1. [3 marks] Create a function to calculate a shopper’s total spending, excluding shipping and tax amount, with Brewbean’s site in a particular year. Exception handling is needed.

Use an anonymous block to call the function and output the result.

CREATE OR REPLACE FUNCTION totalSpending(shopperid bb\_basket.idshopper%type)

RETURN bb\_basket.subtotal%type IS

total bb\_basket.subtotal%type;

BEGIN

SELECT SUM(subtotal)

INTO total

FROM bb\_basket

WHERE idshopper = shopperid

GROUP BY idshopper;

RETURN total;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

RETURN 0;

END;

/

SELECT firstname,

lastname,

totalSpending(idshopper)

FROM bb\_shopper;

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1. **[3 marks]** Create a procedure to allow an employee in the shipping department to update an order status to add **shipping information**. The BB\_BASKETSTATUS table lists events for each order so that a shopper can see the **current status**, **date**, and **comments as each stage** of the order process are finished.

Use an anonymous block to test your procedure.

create or replace procedure status\_ship\_sp

(p\_id in bb\_basketstatus.idbasket%type,

p\_date in bb\_basketstatus.dtstage%type,

p\_shipper in bb\_basketstatus.shipper%type,

p\_track in bb\_basketstatus.shippingnum%type)

is

begin

insert into bb\_basketstatus

(idstatus, idbasket, idstage, dtstage, shipper, shippingnum)

values (bb\_status\_seq.nextval, p\_id, 3, p\_date, p\_shipper, p\_track);

commit;

end;

/

execute status\_ship\_sp(3, '20-FEB-07', 'UPS', 'zw2384yxk4957');

/

select idstatus, idbasket,idstage,

dtstage, shipper, shippingnum

from bb\_basketstatus;

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1. **[3 marks]** Create a function to insert a new product into an existing order, include the product id, unit price, quantity. The output of the function is the message to notify the calling program whether the update succeeded or not.

Use an anonymous block to call the function and output the result.

create or replace function orderupdate(productid bb\_basketitem.idproduct%type,

unitprice bb\_basketitem.price%type,

quantities bb\_basketitem.quantity%type,

basketid bb\_basketitem.idbasket%type,

basketitemid bb\_basketitem.idbasketitem%type)

return number

is

begin

insert into bb\_basketitem (idproduct, price, quantity, idbasket, idbasketitem)

values(productid, unitprice, quantities, basketid, basketitemid);

dbms\_output.put\_line('Success');

return 1;

exception when OTHERS then dbms\_output.put\_line(' NO Success');

end orderupdate;

/

declare

var1 number;

begin

var1:=orderupdate(6,1,2,3,48);

end;

/

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1. **[3 marks]** Create a function to determine the total pledge amount for a project. Use the function in an SQL statement to list all projects, displaying project ID, project name, and project pledge total amount. Format the pledge total amount to show a dollar sign.

Add at least two rows in dd\_pledge for the project “Covid-19 relief fund” which you created in assignment#2.

CREATE OR REPLACE FUNCTION total\_calculator(projectid dd\_pledge.idproj%type)

RETURN dd\_pledge.pledgeamt%type IS

total dd\_pledge.pledgeamt%type;

BEGIN

SELECT SUM(pledgeamt)

INTO total

FROM dd\_pledge

WHERE idproj = projectid

GROUP BY idproj;

RETURN total;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

RETURN 0;

END;

/

SELECT TO\_CHAR(total\_calculator(d.idproj),'L9G99') AS TotalAmount,

d.idproj,

d.projname

FROM dd\_project d

GROUP BY d.idproj, d.projname;

1. **[2 marks]** Create a procedure to allow company employee to add new product to the database. This procedure needs only IN parameters.

Use an anonymous block to test your procedure.

create or replace procedure basket\_add\_sp

(p\_id in bb\_basketitem.idbasket%type,

p\_prod in bb\_basketitem.idproduct%type,

p\_price in bb\_basketitem.price%type,

p\_qnty in bb\_basketitem.quantity%type)

is

begin -- insert into table

insert into bb\_basketitem (idbasketitem, idbasket,

idproduct, price, quantity)

values (bb\_idbasketitem\_seq.nextval, p\_id, p\_prod,

p\_price, p\_qnty);

commit;

end;

/

Column description heading 'description' format A50;

select idproduct, description from bb\_product;

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