SQL-Assignment-4

Database-link: - <https://github.com/microsoft/sql-server-samples/blob/master/samples/databases/northwind-pubs/instnwnd.sql>

1)Create a stored procedure in the Northwind database that will calculate the average

value of Freight for a specified customer.Then, a business rule will be added that will

be triggered before every Update and Insert command in the Orders controller,and

will use the stored procedure to verify that the Freight does not exceed the average

freight. If it does, a message will be displayed and the command will be cancelled.

CREATE PROCEDURE avg\_freight

@customer\_id varchar(40)

AS

BEGIN

select c.CompanyName,avg(Freight) AS "AVERAGE" from Customers c inner join orders o on c.CustomerID=o.CustomerID

where o.OrderID=@order\_id group by c.CustomerID,CompanyName;

END

CREATE TRIGGER tr\_orders\_insert

on Orders

for insert

AS

BEGIN

declare @id VARCHAR(40);

select @id=CustomerID from inserted;

declare @freight money;

select @freight=Freight from inserted;

EXEC avg\_freight @customer\_id=@id;

if(exists(select 1 from orders WHERE CustomerID=@id HAVING avg(Freight)>@freight))

begin

print('row is not added' );

rollback

end

else

begin

print('row is added');

print('new order from CustomerID = '+ @id +' at ' + cast(getdate() as varchar(40)) );

end

END

CREATE TRIGGER tr\_orders\_update

on Orders

for update

AS

BEGIN

declare @id VARCHAR(40);

select @id=CustomerID from inserted;

declare @freight money;

select @freight=Freight from inserted;

EXEC avg\_freight @customer\_id=@id;

if(exists(select 1 from orders WHERE CustomerID=@id HAVING avg(Freight)>@freight))

begin

print(' row is not Updated ' );

rollback

end

else

begin

print(' row is Updated ');

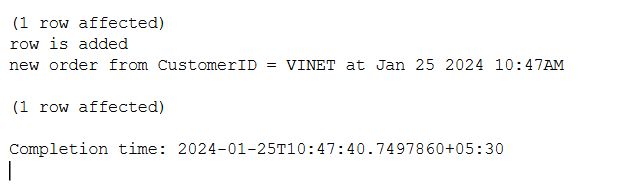
print('new order from CustomerID = '+ @id +' at ' + cast(getdate() as varchar(40)) );

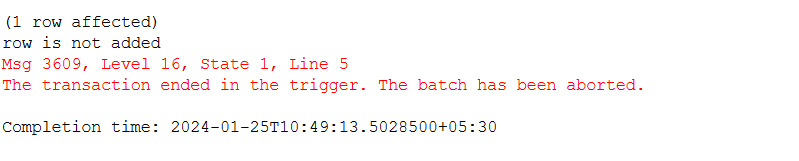
end

END

RUN:- exec avg\_freight @customer\_id='RICSU';







2)write a SQL query to Create Stored procedure in the Northwind database to retrieve

Employee Sales by Country

CREATE PROCEDURE country\_sales

@firstname varchar(40),

@country varchar(40)

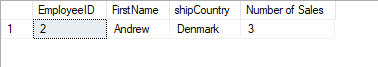
AS

BEGIN

select o.EmployeeID,e.FirstName,shipCountry,count(ShipCountry) as "Number of Sales" from orders o left join Employees e on o.EmployeeID=e.EmployeeID where e.FirstName=@firstname and shipCountry=@country group by o.EmployeeID,e.FirstName,ShipCountry

END

RUN:- exec country\_sales @firstname='Andrew' ,@country='Denmark';



3) write a SQL query to Create Stored procedure in the Northwind database to retrieve

Sales by Year

CREATE PROCEDURE year\_sale

@year int

AS

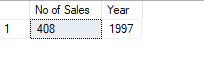
BEGIN

select count(year(OrderDate)) as "No of Sales",year(OrderDate) as "Year" from Orders

where year(OrderDate)=@year group by(year(OrderDate));

END

RUN:-- exec year\_sale @year=1997;



4) write a SQL query to Create Stored procedure in the Northwind database to retrieve

Sales By Category

CREATE PROCEDURE category\_sales

@name varchar(40)

AS

BEGIN

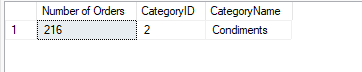
select count(OrderID) as "Number of Orders",p.CategoryID,c.CategoryName from Products p inner join [Order Details] od

on p.ProductID=od.ProductID inner join Categories c on p.CategoryID=c.CategoryID where c.CategoryName=@name

group by p.CategoryID,c.CategoryName;

END

RUN:- exec category\_sales @name='Condiments';



5) write a SQL query to Create Stored procedure in the Northwind database to retrieve

Ten Most Expensive Products

CREATE PROCEDURE expensive

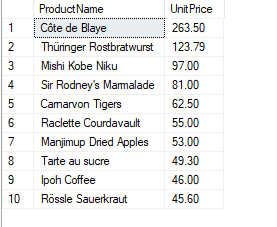
AS

BEGIN

select top 10 ProductName,UnitPrice from Products order by UnitPrice desc;

END

RUN:- exec expensive;



6) write a SQL query to Create Stored procedure in the Northwind database to insert

Customer Order Details

CREATE PROCEDURE add\_orderDetails

@order\_id int,

@product\_id int,

@unitPrice float,

@quantity int,

@discount float

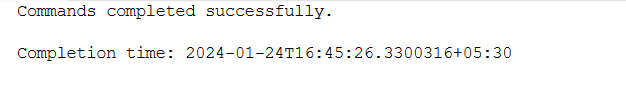
AS

BEGIN

INSERT "Order Details" VALUES(@order\_id,@product\_id,@unitPrice,@quantity,@discount);

END

RUN:- exec add\_orderDetails [@order\_id=10648,@product\_id=42,@unitPrice=9.8,@quantity=10,@discount=0](mailto:@order_id=10648,@product_id=42,@unitPrice=9.8,@quantity=10,@discount=0);



7) write a SQL query to Create Stored procedure in the Northwind database to update

Customer Order Details

CREATE PROCEDURE update\_orderDetails

@order\_id int,

@product\_id int,

@unitPrice float,

@quantity int,

@discount float

AS

BEGIN

IF(@unitPrice is not NULL)

BEGIN

update "Order Details" set UnitPrice=@unitPrice where OrderID=@order\_id and ProductID=@product\_id;

END

IF(@quantity is not NULL)

BEGIN

update "Order Details" set quantity=@quantity where OrderID=@order\_id and ProductID=@product\_id;

END

IF(@discount is not NULL)

BEGIN

update "Order Details" set discount=@discount where OrderID=@order\_id and ProductID=@product\_id;

END

END

RUN-ANY:-

exec update\_orderDetails @order\_id=10956,@product\_id=42,@unitPrice=11,@quantity=565;

exec update\_orderDetails @order\_id=10956,@product\_id=42,@quantity=50;

exec update\_orderDetails @order\_id=10956,@product\_id=42,@discount=0.10;

