/\*

1. Các toán tử so sánh:

- Bằng : = hoặc is null

- Khác : <> hoặc is not null

- Tồn tại: exists / in

- Không tồn tại: not exists / not in

\*/

--Ví dụ Bằng

select \* from SanPham where tensp = 'Bia 333'

select \* from SanPham where mota is NULL

--Khác

select \* from SanPham where tensp <> 'Bia 333'

select \* from SanPham where mota is not NULL

-- Tồn tại

-- tìm những sản phẩm đã được mua trong đơn mua hàng

select \* from SanPham s

where exists

(

select 1 from ChiTietDonMuaHang ct where ct.idSP = s.idsp

)

select \* from SanPham s

where s.idsp in

(

select ct.idSP from ChiTietDonMuaHang ct

)

-- Không Tồn tại

-- tìm những sản phẩm chưa được mua trong đơn mua hàng

select \* from SanPham s

where not exists

(

select 1 from ChiTietDonMuaHang ct where ct.idSP = s.idsp

)

select \* from SanPham s

where s.idsp not in

(

select ct.idSP from ChiTietDonMuaHang ct

)

/\*

2. So sánh thời gian

- DATEDIFF( loại so sánh (DD, MM, YEAR, minute, hour, second, millisecond), Thời gian nhỏ hơn , Thời gian lớn hơn )

- ngay so sanh between ngay bat dau and ngay ket thuc

- YEAR, MONTH, DAY

- DATEPART (DD/ MM/ YYYY)

\* ép kiểu: cast ( [giá trị cần ép kiểu] as [kiểu dữ liệu]

\*/

-- DATEDIFF

select \* from DonMuaHang d where DATEDIFF(DD, '2022-04-02', d.ngayDMH) = 0

select DATEDIFF(HOUR, '2022-04-14 20:00:00', '2022-04-14 22:30:00')

select DATEDIFF(YEAR, '2024-04-14 20:00:00', '2023-04-14 22:30:00')

-- between

select \* from DonMuaHang d where cast(d.ngayDMH as date) between '2022-04-01' and '2022-04-01'

-- year month day

select \* from DonMuaHang d

where DATEDIFF(DD, '2022-04-01', d.ngayDMH) >=0

and DATEDIFF(DD, d.ngayDMH, '2022-04-30') >=0

select \* from DonMuaHang d

where YEAR( d.ngayDMH) = 2022

and MONTH( d.ngayDMH) = 4

select \* from DonMuaHang d

where DATEPART(YYYY,d.ngayDMH ) = 2022

and DATEPART(MM, d.ngayDMH) = 4

/\*

3. lấy top kết quả:

select TOP n \* from tenbang

\*/

select top 1 \* from DonMuaHang

/\*

4. sắp xếp theo thứ tự abcxyz

Cú pháp: select \* from ... ORDER BY tencot1 ASC, tencot2 DESC,...

ASC : tăng dần

DESC: giảm dần

\*/

select \* from DonMuaHang

select top 1 \* from DonMuaHang order by tongtienDMH desc

/\*

5. HAVING câu so sánh

\*/

select d.ngayDMH, sum(d.tongtienDMH) as TongTien

from DonMuaHang d

group by d.ngayDMH

having sum(d.tongtienDMH) < 10000000

select \* from (

select d.ngayDMH, sum(d.tongtienDMH) as TongTien

from DonMuaHang d

group by d.ngayDMH

) as dt

where dt.TongTien < 10000000

/\*

6. kiểu join : outer apply

\*/

select d.maDMH, d.tongtienDMH

, (select sum(c.tongtien) from ChiTietDonMuaHang c where c.idDMH = d.id) as vaydo

from DonMuaHang d

where d.tongtienDMH =

(

select sum(c.tongtien) from ChiTietDonMuaHang c where c.idDMH = d.id

)

select d.maDMH, d.tongtienDMH , calSum.TongTienTinhTuItem

from DonMuaHang d

outer apply(

select sum(c.tongtien) as TongTienTinhTuItem from ChiTietDonMuaHang c where c.idDMH = d.id

) as calSum

where d.tongtienDMH = isnull(calSum.TongTienTinhTuItem,0)

/\*

7. isnull(gia tri, gia tri nếu là null)

nullif(gia tri, gia tri về null nếu)

\*/

select nullif(1,1)

select nullif(2,1)

select isnull(2,1)

select isnull(null,1)