CREATE DATABASE QL\_SX

USE QL\_SX

CREATE TABLE LOAI

(

MALOAI CHAR(5) PRIMARY KEY,

TENLOAI NVARCHAR(50)

)

CREATE TABLE SANPHAM

(

MASP CHAR(5) PRIMARY KEY,

TENSP NVARCHAR(50),

MALOAI CHAR(5) FOREIGN KEY(MALOAI) REFERENCES SANPHAM,

CONSTRAINT TENSP\_DUYNHAT UNIQUE(TENSP)

)

set dateformat dmy

CREATE TABLE NHANVIEN

(

MANV CHAR(5) PRIMARY KEY,

HOTEN NVARCHAR(50),

NGAYSINH DATE,

CHECK(DATEDIFF(YEAR, NGAYSINH, GETDATE()) >= 18 AND DATEDIFF(YEAR, NGAYSINH, GETDATE()) <= 55),

PHAI BIT NOT NULL DEFAULT 0

)

set dateformat dmy

CREATE TABLE PHIEUXUAT

(

MAPX INT IDENTITY(1,1) PRIMARY KEY,

NGAYLAP DATE,

MANV CHAR(5) FOREIGN KEY(MANV) REFERENCES NHANVIEN

)

DROP TABLE PHIEUXUAT

CREATE TABLE CHITIETPHIEUXUAT

(

MAPX INT FOREIGN KEY(MAPX) REFERENCES PHIEUXUAT,

MASP CHAR(5) FOREIGN KEY(MASP) REFERENCES SANPHAM,

SOLUONG TINYINT

)

DROP TABLE CHITIETPHIEUXUAT

--CÂU 1

CREATE VIEW CAU1

AS

(

SELECT S.MASP,TENSP,SUM(SOLUONG) AS[TỔNG SỐ LƯỢNG ]

FROM SANPHAM S,CHITIETPHIEUXUAT C,PHIEUXUAT

WHERE S.MASP=C.MASP AND C.MAPX=PHIEUXUAT.MAPX AND YEAR(NGAYLAP)=2010

GROUP BY S.MASP,TENSP

)

GO

--CÂU 2

CREATE VIEW CAU2

AS

(

SELECT DISTINCT SANPHAM.MASP,TENSP,TENLOAI

FROM SANPHAM,PHIEUXUAT,LOAI,CHITIETPHIEUXUAT,NHANVIEN

WHERE LOAI.MALOAI=SANPHAM.MALOAI AND SANPHAM.MASP=CHITIETPHIEUXUAT.MASP AND PHIEUXUAT.MAPX=CHITIETPHIEUXUAT.MAPX AND NHANVIEN.MANV=PHIEUXUAT.MANV AND (DAY(NGAYLAP)BETWEEN 1 AND 30) AND (MONTH(NGAYLAP)BETWEEN 1 AND 6) AND YEAR(NGAYLAP)=2010

)

-- CÂU 3

CREATE VIEW CAU3

AS

(

SELECT LOAI.MALOAI,TENLOAI, SUM(SOLUONG) AS[SỐ LƯỢNG SP]

FROM LOAI,CHITIETPHIEUXUAT,PHIEUXUAT,SANPHAM

WHERE PHIEUXUAT.MAPX=CHITIETPHIEUXUAT.MAPX AND SANPHAM.MASP=CHITIETPHIEUXUAT.MASP AND SANPHAM.MALOAI=LOAI.MALOAI

GROUP BY LOAI.MALOAI,TENLOAI

)

SELECT\*FROM CAU3

DROP VIEW CAU3

-- CÂU 4

SET DATEFORMAT DMY

SELECT COUNT(C.MAPX) AS[SỐ LƯỢNG PHIẾU XUẤT TRONG THÁNG 6]

FROM CHITIETPHIEUXUAT C,PHIEUXUAT,SANPHAM

WHERE C.MAPX=PHIEUXUAT.MAPX AND SANPHAM.MASP=C.MASP AND MONTH(NGAYLAP)=6 AND YEAR(NGAYLAP)=2010

ORDER BY [SỐ LƯỢNG PHIẾU XUẤT TRONG THÁNG 6]

-- CÂU 5

CREATE VIEW CAU5

AS

(

SELECT PHIEUXUAT.MAPX,C.MASP,SOLUONG,NGAYLAP,MANV

FROM PHIEUXUAT,CHITIETPHIEUXUAT C

WHERE PHIEUXUAT.MAPX=C.MAPX AND MANV='NV01'

)

DROP VIEW CAU5

-- CÂU 6

SELECT \*

FROM NHANVIEN

WHERE PHAI='1' AND (DATEDIFF(YEAR, NGAYSINH, GETDATE()) > 25 AND DATEDIFF(YEAR, NGAYSINH, GETDATE()) < 30)

-- CÂU 7

SELECT PHIEUXUAT.MANV,HOTEN , COUNT(C.MAPX) AS[SỐ LƯỢNG PX CỦA TỪNG NV]

FROM NHANVIEN,CHITIETPHIEUXUAT C,PHIEUXUAT

WHERE C.MAPX=PHIEUXUAT.MAPX AND NHANVIEN.MANV=PHIEUXUAT.MANV

GROUP BY PHIEUXUAT.MANV,HOTEN

-- CÂU 8

SELECT TENSP ,C.MASP, SUM(SOLUONG) AS[SỐ LƯỢNG SẢN PHẨM ĐÃ XUẤT]

FROM SANPHAM,CHITIETPHIEUXUAT C

WHERE SANPHAM.MASP=C.MASP

GROUP BY TENSP ,C.MASP

-- CÂU 9

SELECT TOP 1 PHIEUXUAT.MANV,HOTEN , COUNT(C.MAPX) AS[SỐ LƯỢNG PX CỦA NV]

FROM NHANVIEN,CHITIETPHIEUXUAT C,PHIEUXUAT

WHERE C.MAPX=PHIEUXUAT.MAPX AND NHANVIEN.MANV=PHIEUXUAT.MANV

GROUP BY PHIEUXUAT.MANV,HOTEN

-- CÂU 10

SELECT TOP 1 TENSP , SUM(SOLUONG) AS[SỐ LƯỢNG SẢN PHẨM XUẤT NHÌU NHẤT 2010]

FROM SANPHAM,CHITIETPHIEUXUAT C,PHIEUXUAT

WHERE SANPHAM.MASP=C.MASP AND PHIEUXUAT.MAPX=C.MAPX AND YEAR(NGAYLAP)=2010

GROUP BY TENSP ,C.MASP

--FUNCTION

--CÂU 1

CREATE FUNCTION C1(@TENSP NVARCHAR(50),@NAM INT)

RETURNS INT

AS

BEGIN

DECLARE @SOLUONG INT;

SELECT @SOLUONG=SUM(SOLUONG)

FROM SANPHAM,CHITIETPHIEUXUAT C,PHIEUXUAT

WHERE C.MAPX=PHIEUXUAT.MAPX AND SANPHAM.MASP=C.MASP AND SANPHAM.TENSP=@TENSP AND YEAR(NGAYLAP)=@NAM

RETURN @SOLUONG;

END

GO

DROP FUNCTION C1

SELECT dbo.C1(N'Xi măng',2010)

--CÂU 2

CREATE FUNCTION C2(@MANV VARCHAR(5))

RETURNS INT

AS

BEGIN

DECLARE @TONG INT;

SELECT @TONG= COUNT(C.MAPX)

FROM PHIEUXUAT,CHITIETPHIEUXUAT C

WHERE C.MAPX=PHIEUXUAT.MAPX AND MANV=@MANV

RETURN @TONG;

END

GO

DROP FUNCTION C2

SELECT dbo.C2('NV01')

-- CÂU 3

CREATE FUNCTION C3(@NAM INT)

RETURNS TABLE

AS

RETURN

(

SELECT DISTINCT SANPHAM.TENSP,SANPHAM.MASP

FROM SANPHAM,PHIEUXUAT,CHITIETPHIEUXUAT C

WHERE SANPHAM.MASP=C.MASP AND PHIEUXUAT.MAPX=C.MAPX AND YEAR(NGAYLAP)=@NAM

)

GO

DROP FUNCTION C3

SELECT \* FROM C3 (2010)

-- CÂU 4

CREATE FUNCTION Cau4(@manv CHAR(5))

RETURNS @ds TABLE(

MAPX CHAR(5),

MASP CHAR(5),

SL INT

)

AS

BEGIN

IF(@manv IS NULL)

INSERT INTO @ds SELECT \* FROM CHITIETPHIEUXUAT

ELSE

INSERT INTO @ds SELECT CHITIETPHIEUXUAT.MAPX,CHITIETPHIEUXUAT.MASP,CHITIETPHIEUXUAT.SOLUONG

FROM CHITIETPHIEUXUAT join PHIEUXUAT ON CHITIETPHIEUXUAT.MAPX=PHIEUXUAT.MAPX

WHERE PHIEUXUAT.MANV=@manv

RETURN

END

SELECT \* FROM Cau4 ('NV01')

-- CÂU 5

CREATE FUNCTION CC(@MAPX INT)

RETURNS NVARCHAR(50)

AS

BEGIN

DECLARE @TEN NVARCHAR(50);

SELECT @TEN=NHANVIEN.HOTEN

FROM NHANVIEN,PHIEUXUAT

WHERE NHANVIEN.MANV=PHIEUXUAT.MANV AND MAPX=@MAPX

RETURN @TEN;

END

DROP FUNCTION C

SELECT dbo.CC(2)

select \*

from PHIEUXUAT,NHANVIEN

where PHIEUXUAT.MANV=NHANVIEN.MANV

--CÂU 6

CREATE FUNCTION C6(@T1 INT,@T2 INT)

RETURNS NVARCHAR

AS

BEGIN

RETURN

(

SELECT P.MAPX

FROM PHIEUXUAT P,CHITIETPHIEUXUAT C

WHERE P.MAPX=C.MAPX AND (DATEDIFF(DAY, NGAYLAP, GETDATE()) >= @T1 AND DATEDIFF(DAY, NGAYLAP, GETDATE()) <= @T2)

)

END

GO

DROP FUNCTION C6

SELECT dbo.C6(1,3)

-- CÂU 7

CREATE FUNCTION C7(@MAPX INT)

RETURNS DATE

AS

BEGIN

DECLARE @NAM DATE;

SELECT @NAM =PHIEUXUAT.NGAYLAP

FROM PHIEUXUAT,CHITIETPHIEUXUAT C

WHERE C.MAPX=PHIEUXUAT.MAPX AND PHIEUXUAT.MAPX=@MAPX

RETURN @NAM;

END

GO

DROP FUNCTION C7

PRINT 'NGAY LAP:' +CONVERT(VARCHAR(10),dbo.C7('4'))

-- PROCDURE

--CÂU 1

CREATE PROC P1(@TEN NVARCHAR(50))

AS

(

SELECT SOLUONG=dbo.C1(@TEN,2010)

)

EXEC P1 N'Xi măng'

DROP PROC P1

--CÂU 2

CREATE PROC P2(@TENSP NVARCHAR(50))

AS

IF NOT EXISTS (SELECT \* FROM SANPHAM WHERE SANPHAM.TENSP = @TENSP)

SELECT @TENSP=0

ELSE

SELECT SUM(SOLUONG)

FROM CHITIETPHIEUXUAT C,SANPHAM,PHIEUXUAT

WHERE SANPHAM.MASP=C.MASP AND C.MAPX=PHIEUXUAT.MAPX

AND YEAR(NGAYLAP)=2010 AND MONTH(NGAYLAP) BETWEEN 4 AND 6

AND SANPHAM.TENSP=@TENSP

DROP PROC P2

EXEC P2 N'Xi măng'

-- CÂU 3

CREATE PROC P3(@TENSP NVARCHAR(50))

AS

BEGIN

DECLARE @SL INT;

SELECT @SL=dbo.P2(@TENSP,2010)

END

DROP PROC P3

EXEC dbo.P3 N'Xi măng'

--CÂU 4

CREATE PROC C4(@MALOAI CHAR(5),@TENLOAI NVARCHAR(50))

AS

INSERT INTO LOAI VALUES(@MALOAI,@TENLOAI)

EXEC dbo.C4 '4',N'Hàng công nghệ'

-- CÂU 5

CREATE PROC C5(@MANV VARCHAR(5))

AS

DELETE

FROM NHANVIEN

WHERE MANV=@MANV

DROP PROC C5

EXEC dbo.C5 'NV02'

--TRIGGER

1.STORE PROCEDURE

2.CHỨC NĂNG: ĐẢM BẢO CÁC RNAFG BUỘC TOÀN VẸN(CONSTRAINT) -- MIỀN GIÁ TRỊ

3.TỰ ĐỘNG THỰC THI KHI CAN THIỆP VÀO DỮ LIỆU

INSERT:INSERTED (HỆ THỐNG)

DELETE:DELETED

UPDATE:DELETED AND INSERTED

4.KHÔNG CÓ THAM SỐ ,CHẠY TRÊN SERVER

-- CÂU 1

CREATE TRIGGER C211 ON CHITIETPHIEUXUAT

FOR INSERT ,UPDATE

AS

DECLARE @MAPX VARCHAR(5)

SELECT @MAPX=MAPX FROM INSERTED

IF(SELECT COUNT(\*) FROM CHITIETPHIEUXUAT CT ,INSERTED I WHERE CT.MAPX=I.MAPX AND I.MAPX=@MAPX) >5

BEGIN

RAISERROR ('1 PHIEU XUAT CO TOI DA 5 CHI TIET',16,1)

ROLLBACK TRANSACTION

END

GO

DROP TRIGGER C211

SELECT \* FROM CHITIETPHIEUXUAT

SELECT \* FROM SANPHAM

INSERT INTO CHITIETPHIEUXUAT VALUES('1','4',5)

INSERT INTO CHITIETPHIEUXUAT VALUES('1','5',5)

INSERT INTO CHITIETPHIEUXUAT VALUES('1','6',5)

-- CÂU 2

--cau 2:

create trigger C2\_trigger on PHIEUXUAT

for insert ,update

as

declare @count int,@ngay date

select @ngay= (select i.NGAYLAP from inserted i join PHIEUXUAT p on i.MAPX=p.MAPX)

set @count=(select count(\*) from PHIEUXUAT where NGAYLAP =@ngay

GROUP By PHIEUXUAT.MANV)

if(@count >=11)

begin

print('Lap Toi Da 10 Phieu Xuat Trong Mot Ngay')

rollback tran

end

drop trigger C2\_trigger

insert into PHIEUXUAT(NGAYLAP,MANV) values ('12/03/2010','NV01')

--cau3:

create trigger C3\_trigger on CHITIETPHIEUXUAT

for insert,update

as

declare @mapx int

select @mapx =(select MAPX from inserted)

if not exists (select \* from PHIEUXUAT where MAPX=@mapx)

begin

print('Khong Ton Tai Ma Phieu Xuat')

rollback tran

end

else

begin

print('Them CTPX Thanh Cong')

commit tran

end

insert into CHITIETPHIEUXUAT values (100,'6',15)