# Question 1

1. Create the tables (with the most appropriate field/column constraints & types) and add at least 3 records into each created table.

CREATE TABLE KHACHHANG

(

Ma\_KH varchar(5) primary key,

Ten\_KH nvarchar(50) not null,

Phone\_No varchar(20) not null,

Ghi\_Chu nvarchar(100)

)

GO

CREATE TABLE SANPHAM

(

Ma\_SP varchar(5) primary key,

Ten\_SP nvarchar(50),

Don\_Gia money not null,

Ma\_KH varchar(5) foreign key (Ma\_KH) references KHACHHANG(Ma\_KH)

)

GO

CREATE TABLE DONHANG

(

Ma\_DH varchar(5) primary key,

Ngay\_DH datetime not null,

Ma\_SP varchar(5) foreign key (Ma\_SP) references SANPHAM(Ma\_SP),

SoLuong int

)

INSERT INTO KHACHHANG VALUES('KH001', N'Nguyễn Thanh Thanh','01234567890','VIP')

INSERT INTO KHACHHANG VALUES('KH002', N'Trần Đình Phong','01664567890','VIP')

INSERT INTO KHACHHANG VALUES('KH003', N'Nguyễn Thanh Lam','01245567890','Thuong')

INSERT INTO KHACHHANG VALUES('KH004', N'Phan Dương Dương','0973456789','Thuong')

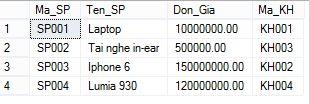


INSERT INTO SANPHAM VALUES('SP001',N'Laptop',10000000,'KH001')

INSERT INTO SANPHAM VALUES('SP002',N'Tai nghe in-ear ',500000,'KH003')

INSERT INTO SANPHAM VALUES('SP003',N'Iphone 6',150000000,'KH002')

INSERT INTO SANPHAM VALUES('SP004',N'Lumia 930',120000000,'KH004')

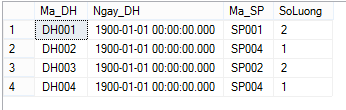


INSERT INTO DONHANG VALUES('DH001',22/06/2015,'SP001',2)

INSERT INTO DONHANG VALUES('DH002',15/03/2015,'SP004',1)

INSERT INTO DONHANG VALUES('DH003',16/06/2015,'SP002',2)

INSERT INTO DONHANG VALUES('DH004',22/06/2015,'SP004',1)



1. Create an order slip VIEW which has the same number of lines as the Don\_Hang, with the following information: Ten\_KH, Ngay\_DH, Ten\_SP, So\_Luong, Thanh\_Tien

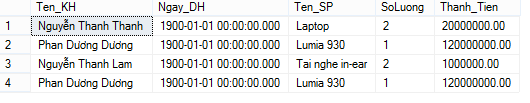
CREATE VIEW Don\_Hang

AS

SELECT A.Ten\_KH, C.Ngay\_DH, B.Ten\_SP, C.SoLuong, B.Don\_Gia \* C.SoLuong AS Thanh\_Tien

FROM KHACHHANG A, SANPHAM B, DONHANG C

WHERE A.Ma\_KH= B.Ma\_KH AND B.Ma\_SP= C.Ma\_SP



Question 2

1. Create the tables (with the most appropriate field/column constraints & types) and add at least 3 records into each created table.

CREATE TABLE EMPLOYEE

(

Employee\_Number int primary key,

Employee\_Name nvarchar(50),

Department\_Number int foreign key (Department\_Number) references DEPARTMENT(Department\_Number)

)

GO

CREATE TABLE EMP\_SKILL

(

Employee\_Number int foreign key (Employee\_Number) references EMPLOYEE(Employee\_Number),

Skill\_Code char(4),

Regis\_Date datetime,

constraint PK\_ES primary key (Employee\_number, Skill\_Code)

)

GO

CREATE TABLE DEPARTMENT

(

Department\_number int primary key,

Department\_Name nvarchar(50)

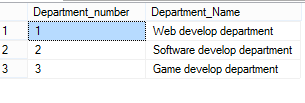
)

----insert

INSERT INTO DEPARTMENT VALUES(1,N'Web develop department')

INSERT INTO DEPARTMENT VALUES(2,N'Software develop department')

INSERT INTO DEPARTMENT VALUES(3,N'Game develop department')



INSERT INTO EMPLOYEE VALUES(1,N'Trần Dương Dương',1)

INSERT INTO EMPLOYEE VALUES(2,N'Trần Đình Hạo',2)

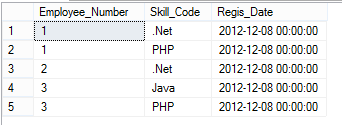
INSERT INTO EMPLOYEE VALUES(3,N'Nguyễn Thanh Thảo',3)



INSERT INTO EMP\_SKILL VALUES(1,'PHP',12/8/2012)

INSERT INTO EMP\_SKILL VALUES(2,'.Net',12/8/2012)

INSERT INTO EMP\_SKILL VALUES(3,'Java',12/8/2012)



1. Specify the names of the employees whore have skill of ‘Java’

SELECT A.Employee\_Number, Employee\_Name, Department\_Name, Skill\_Code

FROM EMPLOYEE A, EMP\_SKILL B, DEPARTMENT C

WHERE Skill\_Code = 'Java' AND

A.Employee\_Number = B.Employee\_Number AND

A.Department\_Number = C.Department\_number

1. Specify the departments which have >=3 employees, print out the list of departments’ employees right after each department.

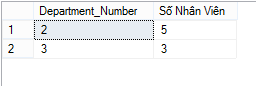
SELECT A.Department\_Number, COUNT(A.Department\_number) AS [Số Nhân Viên]

FROM DEPARTMENT A, EMPLOYEE B

WHERE A.Department\_Number= B.Department\_Number

GROUP BY A.Department\_Number

HAVING COUNT(B.Employee\_Number)>=3



1. Use SUB-QUERY technique to list out the different employees (include employee number and employee names) who have multiple skills.

SELECT DISTINCT Employee\_Number,Employee\_Name

FROM EMPLOYEE

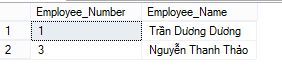
WHERE Employee\_Number IN (SELECT C.Employee\_Number

FROM EMPLOYEE C, EMP\_SKILL D

WHERE C.Employee\_Number = D.Employee\_Number

GROUP BY C.Employee\_Number

HAVING COUNT(D.Employee\_Number)>=2)



1. Create a view to show different employees (with following information: employee number and employee name, department name) who have multiple skills.

CREATE VIEW MUL\_SKILL\_EMPLOYEE

AS

SELECT Employee\_Number, Employee\_Name, Department\_Name

FROM EMPLOYEE A , DEPARTMENT B

WHERE A.Department\_Number = B.Department\_number AND

Employee\_Number IN (SELECT C.Employee\_Number

FROM EMPLOYEE C, EMP\_SKILL D

WHERE C.Employee\_Number = D.Employee\_Number

GROUP BY C.Employee\_Number

HAVING COUNT(D.Employee\_Number)>=2)

