**TABLE:** PHONG

|  |  |  |
| --- | --- | --- |
| **FIELD NAME** | **DATA TYPE** | **CONSTRAINT** |
| MAPHONG | VARCHAR(10) | PK |
| TENPHONG | NVARCHAR(100) |  |
| DIADIEM | NVARCHAR(100) |  |
| SONV | INT | >=0 |

**TABLE:** DUAN

|  |  |  |
| --- | --- | --- |
| **FIELD NAME** | **DATA TYPE** | **CONSTRAINT** |
| MADUAN | VARCHAR(10) | PK |
| TENDUAN | NVARCHAR(100) |  |
| KINHPHI | FLOAT | >=0 |

**TABLE:** NHANVIEN

|  |  |  |
| --- | --- | --- |
| **FIELD NAME** | **DATA TYPE** | **CONSTRAINT** |
| MANV | VARCHAR(10) | PK |
| HOLOT | NVARCHAR(30) |  |
| TENNV | NVARCHAR(20) |  |
| SDT | VARCHAR(20) |  |
| MAPHONG | VARCHAR(10) | FK -> PHONG |

**TABLE:** NV\_DA

|  |  |  |
| --- | --- | --- |
| **FIELD NAME** | **DATA TYPE** | **CONSTRAINT** |
| MANV | VARCHAR(10) | FK -> NHANVIEN (PK) |
| MADUAN | VARCHAR(10) | FK -> DUAN (PK) |
| SOGIO | INT | >=0 |

A diagram of a company

Description automatically generated with medium confidence

CREATE DATABASE QLNV

USE QLNV

CREATE TABLE PHONG

(

MAPHONG VARCHAR(10),

TENPHONG NVARCHAR(100),

DIADIEM NVARCHAR(100),

SONV INT,

CONSTRAINT PK1 PRIMARY KEY(MAPHONG),

CONSTRAINT CH\_SONV CHECK (SONV >=0),

);

CREATE TABLE DUAN

(

MADUAN VARCHAR(10),

TENDUAN NVARCHAR(100),

KINHPHI FLOAT,

CONSTRAINT PK2 PRIMARY KEY(MADUAN),

CONSTRAINT CH\_KINHPHI CHECK (KINHPHI >=0),

);

CREATE TABLE NHANVIEN

(

MANV VARCHAR(10),

HOLOT NVARCHAR(30),

TENNV NVARCHAR(20),

SDT VARCHAR(20),

MAPHONG VARCHAR(10),

CONSTRAINT PK\_MANV PRIMARY KEY(MANV),

CONSTRAINT FK\_MAPHONG FOREIGN KEY(MAPHONG) REFERENCES PHONG(MAPHONG),

);

CREATE TABLE NV\_DA

(

MANV VARCHAR(10),

MADUAN VARCHAR(10),

SOGIO INT

CONSTRAINT PK\_NVDA PRIMARY KEY(MANV, MADUAN),

CONSTRAINT FR\_MANV FOREIGN KEY(MANV) REFERENCES NHANVIEN(MANV),

CONSTRAINT FR\_MADUAN FOREIGN KEY(MADUAN) REFERENCES DUAN(MADUAN),

CONSTRAINT CH\_SOGIO CHECK(SOGIO >=0),

);

INSERT INTO PHONG

VALUES

(1, N'PHONG 1', '1 LE DUAN', 10 ),

(2, N'PHONG 2', '1 NGUYEN VAN LINH', 20 ),

(3, N'PHONG 3', '1 LE HONG PHONG', 15 );

SELECT \* FROM PHONG

INSERT INTO DUAN

VALUES

(1, N'DU AN SO 1', 1000000000),

(2, N'DU AN SO 2', 1200000000),

(3, N'DU AN SO 3', 2000000000);

SELECT \* FROM DUAN

INSERT INTO NHANVIEN

VALUES

(1, N'NGUYEN VAN', N'A', N'0123456789', 1),

(2, N'TRAN THI', N'B', N'0123456978', 2),

(3, N'LE VAN', N'c', N'0123456879', 3);

SELECT \* FROM NHANVIEN

INSERT INTO NV\_DA

VALUES

(1,1,80),

(2,2,50),

(3,3,100);

SELECT \* FROM NV\_DA

------------------------------------------------------------------------------------

ALTER TABLE NHANVIEN

ADD DIACHI NVARCHAR(100);

ALTER TABLE NHANVIEN

ALTER COLUMN SDT VARCHAR(30);

ALTER TABLE NHANVIEN

DROP COLUMN DIACHI;

ALTER TABLE PHONG

ADD CONSTRAINT CH\_NV CHECK(SONV >= 0);

ALTER TABLE PHONG

DROP CONSTRAINT CH\_NV;

DELETE FROM NV\_DA

WHERE SOGIO <= 10;

UPDATE DUAN

SET KINHPHI = 5000

WHERE MADUAN = '1';

SELECT \* FROM NHANVIEN

SELECT MANV, HOLOT, TENNV

FROM NHANVIEN;

SELECT MANV AS N'Mã nhân viên:', HOLOT AS N'Họ lót',TENNV AS N'Tên nhân viên'

FROM NHANVIEN;

SELECT CONCAT(HOLOT, ' ', TENNV) AS N'HỌ VÀ TÊN'

FROM NHANVIEN;

SELECT HOLOT +' '+ TENNV AS N'HỌ VÀ TÊN'

FROM NHANVIEN;

SELECT TOP 2 \*

FROM NHANVIEN;

SELECT TOP 50 PERCENT \*

FROM NHANVIEN;

SELECT COUNT(\*) AS N'TỔNG SỐ'

FROM NHANVIEN;

SELECT DISTINCT MANV

FROM NV\_DA;

SELECT Distinct Count(\*) as SoLuongNhanVien

From NV\_DA

SELECT \* From DUAN where MaDuan in ('1','2');

SELECT \* From DUAN where MaDuan not in ('1','2');

SELECT \* From DUAN where KinhPhi between 1000 and 5000

SELECT \* From DUAN where KinhPhi < 1000 or KinhPhi > 5000

SELECT MaNV, TenNV, A.MaPhong, TenPhong from NHANVIEN A,

PHONG B Where A.MaPhong = B.MaPhong

SELECT \* FROM NHANVIEN

ORDER BY TenNV ASC

SELECT \* FROM NHANVIEN

ORDER BY TenNV ASC, HoLot DESC

SELECT MaPhong, Count(\*) as TongSoNhanVien FROM NHANVIEN

Group by MaPhong

SELECT Count(\*) as TongSoNhanVien FROM NHANVIEN

Where MaPhong = '1'

SELECT MaPhong, Count(\*) as TongSoPhongNhanVien2 FROM NHANVIEN

GROUP BY MaPhong

HAVING Count(\*) > 2

CREATE PROC SP\_NHAPPHONG

(

@MAPHONG VARCHAR(10),

@TENPHONG NVARCHAR(50),

@DIADIEM NVARCHAR(50),

@SONV INT

)

AS INSERT INTO PHONG(MAPHONG, TENPHONG, DIADIEM, SONV)

VALUES(@MAPHONG, @TENPHONG, @DIADIEM, @SONV)

//VIẾT THỦ TỤC KIỂM TRA CÓ BỊ TRÙNG KHÓA CHÍNH HAY KHÔNG

ALTER PROC SP\_NHAPPHONG

(

@MAPHONG VARCHAR(10),

@TENPHONG NVARCHAR(50),

@DIADIEM NVARCHAR(50),

@SONV INT

)

AS

BEGIN

IF EXISTS(SELECT \* FROM PHONG WHERE MAPHONG = @MAPHONG)

BEGIN

--PRINT N'MAPHONG ĐÃ CÓ, BẠN VUI LÒNG NHẬP LẠI MAPHONG KHÁC';

--RETURN -1;

RAISERROR ('MA PHONG DA TON TAI', 16,1)

ROLLBACK TRANSACTION

END

ELSE

BEGIN

INSERT INTO PHONG

VALUES(@MAPHONG, @TENPHONG, @DIADIEM, @SONV)

PRINT N'INTSERT THANH CONG';

END

END

CREATE PROC SP\_NHANVIEN

(

@MANV VARCHAR(10),

@HOLOT NVARCHAR(30),

@TENNV NVARCHAR(20),

@SDT VARCHAR(20),

@MAPHONG VARCHAR(10)

)

AS

BEGIN

IF NOT EXISTS(SELECT \* FROM PHONG WHERE MAPHONG = @MAPHONG)

PRINT N'INTSERT KHONG THANH CONG, MA PHONG KHONG HOP LE';

ELSE

IF EXISTS(SELECT \* FROM NHANVIEN WHERE MANV = @MANV)

PRINT N'TRUNG MA NHAN VIEN';

ELSE

BEGIN

INSERT INTO NHANVIEN

VALUES(@MANV, @HOLOT, @TENNV, @SDT, @MAPHONG)

PRINT N'INTSERT THANH CONG';

END

END

EXEC SP\_NHANVIEN '5', 'DO HUY', 'HOANG', '012334342', 2

SELECT \* FROM NHANVIEN

CREATE PROC SP\_TIMPHONG

(

@MAPHONG VARCHAR(10)

)

AS

SELECT \* FROM PHONG

WHERE MAPHONG = @MAPHONG

EXEC SP\_TIMPHONG '1'

CREATE PROC SP\_NVPHONG

(

@MAPHONG VARCHAR(10)

)

AS

SELECT MANV, HOLOT, TENNV, SDT

FROM NHANVIEN

WHERE MAPHONG = @MAPHONG

EXEC SP\_NVPHONG '2'

CREATE PROC SP\_SONV

(

@MAPHONG VARCHAR(10)

)

AS

SELECT COUNT (\*) AS TONGSO

FROM NHANVIEN

WHERE MAPHONG = @MAPHONG

EXEC SP\_SONV '2'