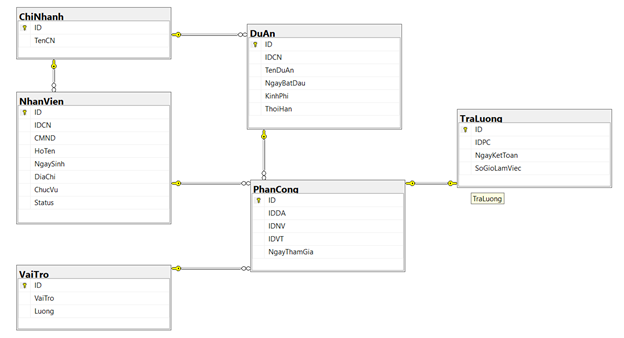
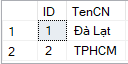
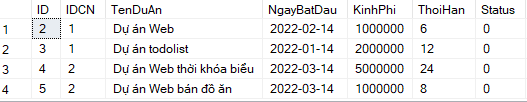
1. **CSDL + Hình chụp dữ liệu**



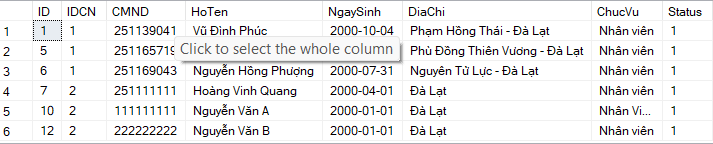
* 1. Bảng ChiNhanh:



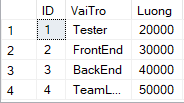
* 1. Bảng DuAn:



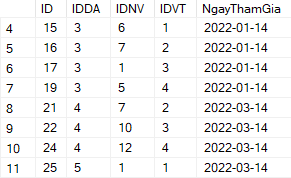
* 1. Bảng NhanVien:



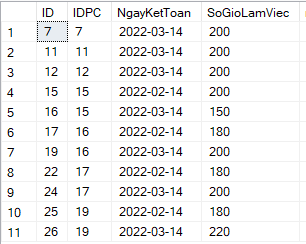
* 1. Bảng VaiTro:



* 1. Bảng PhanCong:



* 1. Bảng TraLuong:



1. **Thủ tục:**

--Chi nhánh

create proc themCN (@ten nvarchar(50)) as

begin

if(@ten not in(select TenCN from ChiNhanh))

insert into ChiNhanh(TenCN) values (@ten);

end;

create proc suaCN(@id int, @ten nvarchar(50)) as

begin

update ChiNhanh set TenCN=@ten where ID =@id;

end;

create proc xoaCN (@id int) as

begin

if(@id not in(select IDCN from NhanVien))

begin

if(@id not in(select IDCN from DuAn))

delete from ChiNhanh where ID=@id;

end;

end;

--Dự án

create proc themDA(@idCN int, @ten nvarchar(50), @ngayBD date, @phi decimal(18,0), @han int) as

begin

if(@ten not in(select TenDuAn from DuAn))

insert into DuAn(IDCN, TenDuAn, NgayBatDau, KinhPhi, ThoiHan, Status) values (@idCN, @ten, @ngayBD, @phi, @han, 0);

end;

create proc suaDA(@id int, @idCN int, @ten nvarchar(50), @ngayBD date, @phi decimal(18,0), @han int) as

begin

update DuAn set IDCN=@idCN, TenDuAn=@ten, NgayBatDau=@ngayBD, KinhPhi=@phi, ThoiHan=@han where ID =@id;

end;

create proc statusDA(@id int, @status bit) as

begin

update DuAn set Status=@status where ID=@id;

end;

--Nhân viên

create proc themNV(@idCN int, @cmnd nvarchar(11) ,@ten nvarchar(50), @ngaySinh date, @diaChi nvarchar(50), @chucVu nvarchar(50)) as

begin

if(@cmnd not in(select CMND from NhanVien))

insert into NhanVien(IDCN, CMND, HoTen, NgaySinh, DiaChi, ChucVu, Status) values (@idCN, @cmnd, @ten, @ngaySinh, @diaChi, @chucVu, 1);

end;

create proc suaNV(@id int, @cmnd nvarchar(11) ,@ten nvarchar(50), @ngaySinh date, @diaChi nvarchar(50), @chucVu nvarchar(50)) as

begin

if(@cmnd not in(select CMND from NhanVien where ID <> @id))

update NhanVien set CMND=@cmnd, HoTen=@ten, NgaySinh=@ngaySinh, DiaChi=@diaChi, ChucVu= @chucVu where ID =@id;

end;

create proc chuyenNV(@id int, @idCN int) as

begin

update NhanVien set IDCN=@idCN where ID=@id;

end;

create proc statusNV(@id int, @status bit) as

begin

update NhanVien set Status=@status where ID=@id;

end;

--Vai trò

create proc themVT (@vaiTro nvarchar(50), @luong decimal(18,0)) as

begin

if(@vaitro not in(select VaiTro from VaiTro))

insert into VaiTro(VaiTro, Luong) values (@vaiTro, @luong);

end;

create proc suaVT(@id int, @vaiTro nvarchar(50), @luong decimal(18,0)) as

begin

update VaiTro set VaiTro=@vaiTro, Luong=@luong where ID =@id;

end;

create proc xoaVT (@id int) as

begin

if(@id not in(select IDVT from PhanCong))

begin

delete from VaiTro where ID=@id;

end;

end;

--Phân công

create proc themPC (@idDA int, @idNV int, @idVT int, @ngayTG date) as

begin

if(not exists (select \* from PhanCong where IDDA=@idDA and IDNV=@idNV and IDVT=@idVT))

insert into PhanCong(IDDA, IDNV, IDVT, NgayThamGia) values (@idDA, @idNV, @idVT, @ngayTG);

end;

create proc suaPC(@id int, @idDA int, @idNV int, @idVT int, @ngayTG date) as

begin

if(not exists (select \* from PhanCong where ID<>@id and IDDA=@idDA and IDNV=@idNV and IDVT=@idVT))

update PhanCong set IDDA=@idDA, IDNV=@idNV, IDVT=@idVT, NgayThamGia=@ngayTG where ID=@id;

end;

--Trả lương

create proc themTL (@idPC int, @ngayKT date, @soGio int) as

begin

if(not exists (select \* from TraLuong where IDPC=@idPC and NgayKetToan=@ngayKT))

insert into TraLuong(IDPC,NgayKetToan,SoGioLamViec) values (@idPC, @ngayKT, @soGio);

end;

create proc suaTL (@id int, @idPC int, @ngayKT date, @soGio int) as

begin

if(not exists (select \* from TraLuong where ID<>@id and IDPC=@idPC and NgayKetToan=@ngayKT))

update TraLuong set IDPC=@idPC, NgayKetToan=@ngayKT, SoGioLamViec=@soGio where ID =@id

end;

create proc xoaTL (@id int) as

begin

delete from TraLuong where ID = @id;

end;

--Báo cáo

create proc dsNhanVienDA (@idDA int) as

begin

select nv.\* from NhanVien nv where nv.ID in (select IDNV from PhanCong where IDDA=@idDA)

end;

create proc luongCT as

begin

select pc.IDNV,nv.HoTen, tl.NgayKetToan, tl.SoGioLamViec, vt.Luong, (tl.SoGioLamViec\*vt.Luong) as SoLuong from TraLuong tl, NhanVien nv, PhanCong pc, VaiTro vt where tl.IDPC=pc.ID and pc.IDNV = nv.ID and pc.IDVT=vt.ID;

end;

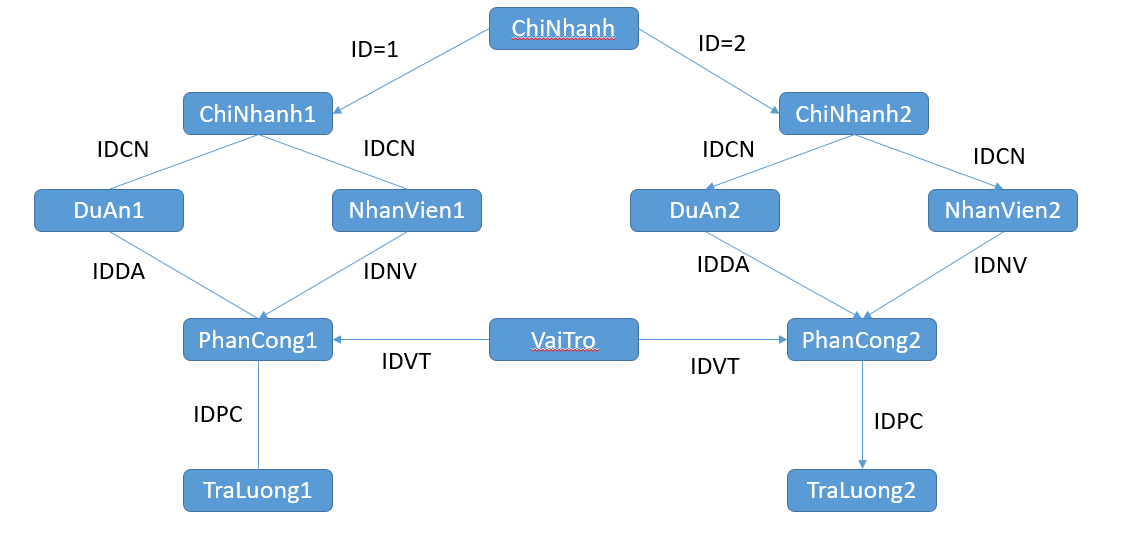
create proc luongCN(@idCN int) as

begin

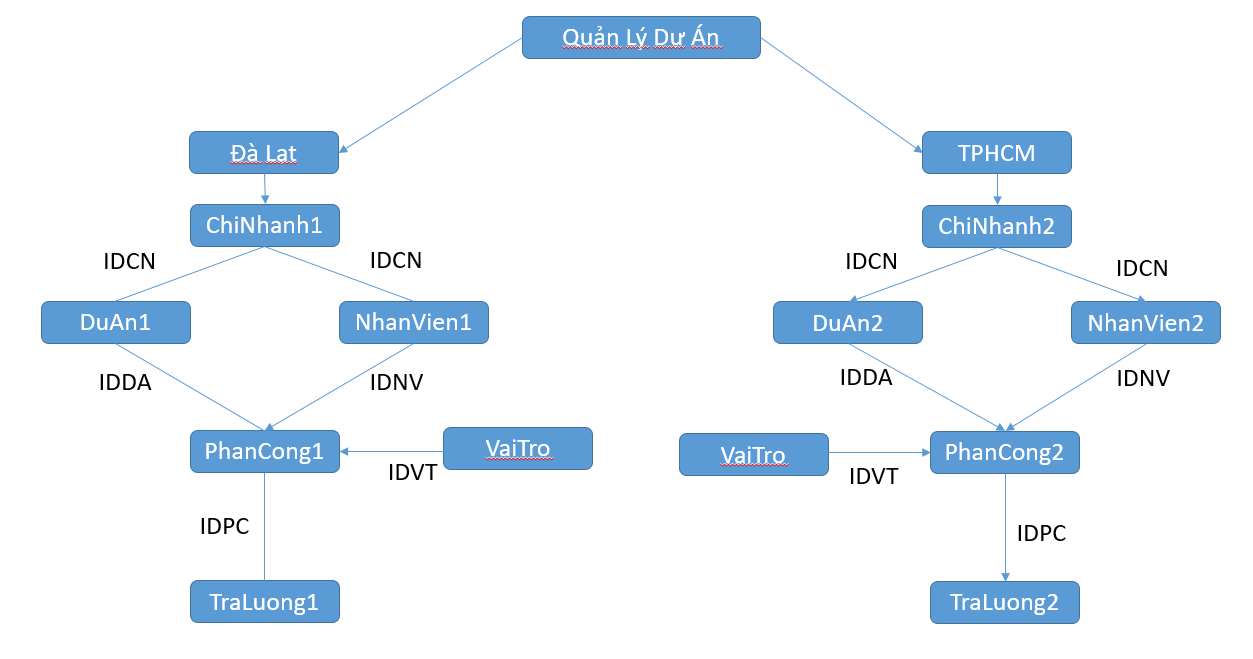
select pc.IDNV,nv.HoTen, tl.NgayKetToan, tl.SoGioLamViec, vt.Luong, (tl.SoGioLamViec\*vt.Luong) as SoLuong from TraLuong tl, NhanVien nv, PhanCong pc, VaiTro vt where tl.IDPC=pc.ID and pc.IDNV = nv.ID and pc.IDVT=vt.ID and nv.IDCN=@idCN;

end;

1. **Sơ đồ phân mảnh:**



1. **Truy vấn phân mảnh bằng đại số quan hệ và SQL**
   * + - Select \* from ChiNhanh where ID = 1, σ(ID=1) (ChiNhanh)
       - Select \* from ChiNhanh where ID = 2, σ(ID=2) (ChiNhanh)
2. **Lược đồ định vị:**



1. CSDL sau phân mảnh:

Chi Nhanh 1

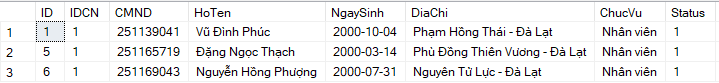
* 1. Bảng ChiNhanh:



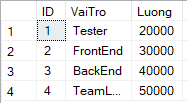
* 1. Bảng DuAn:



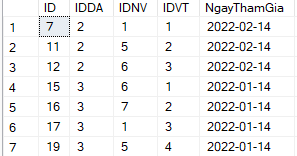
* 1. Bảng NhanVien:



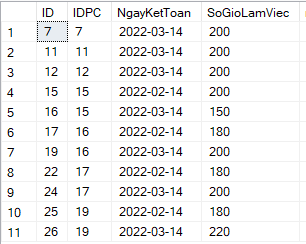
* 1. Bảng VaiTro:



* 1. Bảng PhanCong:



* 1. Bảng TraLuong:



Chi Nhanh 2

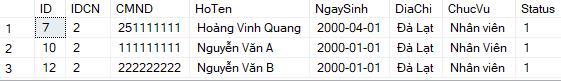
1. Bảng ChiNhanh:



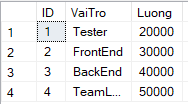
1. Bảng DuAn:



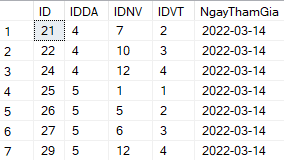
1. Bảng NhanVien:



1. Bảng VaiTro:



1. Bảng PhanCong:



1. Bảng TraLuong:

