

Thủ tục

Bài 1:

Code:

```
create procedure tt_B1 @masach nvarchar(10), @soluongban int output
as
begin
    select @soluongban = SUM(tChiTietHDB.SLBan)
    from tChiTietHDB, tHoaDonBan
    where tChiTietHDB.SoHDB = tHoaDonBan.SoHDB and YEAR(tHoaDonBan.NgayBan) = 2014 and
    tChiTietHDB.MaSach = @masach
end;

declare @slb int;
exec tt_B1 'S01', @slb output;
print @slb;
drop procedure tt_B1;
```

Kết quả:

11

Completion time: 2025-10-07T18:27:06.6158035+07:00

Bài 2:

Code:

```
create procedure tt_B2 @ngay date, @soluonghd int output, @soluongtienban float output
as
begin
    select @soluonghd = COUNT(SoHDB)
    from tHoaDonBan
    where CAST(tHoaDonBan.NgayBan as DATE) = @ngay;

    select @soluongtienban = SUM(tSach.DonGiaBan * tChiTietHDB.SLBan)
    from tSach, tChiTietHDB, tHoaDonBan
    where CAST(tHoaDonBan.NgayBan as DATE) = @ngay and tChiTietHDB.SoHDB =
    tHoaDonBan.SoHDB and tChiTietHDB.MaSach = tSach.MaSach;
end;

declare @slhd int, @sltb float;
exec tt_B2 '2014-08-11', @slhd output, @sltb output;
print @slhd;
print @sltb;
drop procedure tt_B2;
```

Kết quả:

```
1
1.055e+006

Completion time: 2025-10-07T18:33:02.9157089+07:00
```

Bài 3:

Code:

```
create procedure tt_B3 @mancc nvarchar(255), @somasach int output, @sotien float output
as
begin
    select @somasach = COUNT(tChiTietHDN.MaSach)
    from tHoaDonNhap, tChiTietHDN
    where tHoaDonNhap.MaNCC = @mancc and tHoaDonNhap.SoHDN = tChiTietHDN.SoHDN;

    select @sotien = SUM(tSach.DonGiaNhap * tChiTietHDN.SLNhap)
    from tSach, tChiTietHDN, tHoaDonNhap
    where tHoaDonNhap.MaNCC = @mancc and tHoaDonNhap.SoHDN = tChiTietHDN.SoHDN and
    tChiTietHDN.MaSach = tSach.MaSach;
end;

declare @sms int, @st float;
exec tt_B3 'NCC01', @sms output, @st output;
print @sms;
print @st;
drop procedure tt_B3;
```

Kết quả:

```
1
2e+006

Completion time: 2025-10-07T18:34:31.4232031+07:00
```

Bài 4:

Code:

```
create procedure tt_B4 @nam int, @sotiennhaphang float output, @sotienbanhang float
output
as
begin
    select @sotiennhaphang = SUM(tSach.DonGiaNhap * tChiTietHDN.SLNhap)
    from tSach, tChiTietHDN, tHoaDonNhap
    where YEAR(tHoaDonNhap.NgayNhap) = @nam and tHoaDonNhap.SoHDN = tChiTietHDN.SoHDN
    and tChiTietHDN.MaSach = tSach.MaSach;

    select @sotienbanhang = SUM(tSach.DonGiaBan * tChiTietHDB.SLBan)
    from tSach, tChiTietHDB, tHoaDonBan
    where YEAR(tHoaDonBan.NgayBan) = @nam and tChiTietHDB.SoHDB = tHoaDonBan.SoHDB and
    tChiTietHDB.MaSach = tSach.MaSach;
end;
```

```

declare @stnh float, @stbh float;
exec tt_B4 '2014', @stnh output, @stbh output;
print @stnh;
print @stbh;
drop procedure tt_B4;

```

Kết quả:

```

6.11e+006
1.4386e+007

Completion time: 2025-10-07T18:35:02.6315665+07:00

```

Bài 5:

Code:

```

create procedure tt_B5 @manxb nvarchar(255), @soluongton int output
as
begin
    select @soluongton = SUM(tSach.SoLuong)
    from tSach
    where tSach.MaNXB = @manxb;
end;

declare @mnbx nvarchar(255);
exec tt_B5 'NXB01', @mnbx output;
print @mnbx;
drop procedure tt_B5;

```

Kết quả:

```

120

Completion time: 2025-10-07T18:36:06.6717297+07:00

```

Bài 6:

Code:

```

create procedure tt_B6 @sohdn nvarchar(255), @manv nvarchar(255), @ngaynhap datetime,
@mancc nvarchar(255), @masach nvarchar(255), @slnhap int
as
begin
    begin TRAN
        begin TRY
            insert into tHoaDonNhap
            values (@sohdn, @manv, @ngaynhap, @mancc);

            insert into tChiTietHDN
            values (@sohdn, @masach, @slnhap, NULL);

            commit TRAN;

```

```

        end TRY
    begin CATCH
        print 'Error: ' + ERROR_MESSAGE();
        rollback TRAN;
    end CATCH
end;

exec tt_B6 'HDN100', 'NV01', '2014-08-11 00:00:00.000', 'NCC01', 'S01', 100;
select * from tChiTietHDN where SoHDN = 'HDN100';
select * from tHoaDonNhap where SoHDN = 'HDN100';
drop procedure tt_B6;

```

Kết quả:

	SoHDN	MaSach	SLNhap	KhuyenMai
1	HDN100	S01	100	NULL

	SoHDN	MaNV	NgayNhap	MaNCC
1	HDN100	NV01	2014-08-11 00:00:00.000	NCC01

Bài 7:

Code:

```

create procedure tt_B7 @sohdb nvarchar(255)
as
begin
    begin TRAN
        begin TRY
            delete from tHoaDonBan
            where SoHDB = @sohdb;

            delete from tChiTietHDB
            where SoHDB = @sohdb;

            commit TRAN;
        end TRY
        begin CATCH
            print 'Error: ' + ERROR_MESSAGE();
            rollback TRAN;
        end CATCH
    end;

exec tt_B7 'HDB100';
select * from tHoaDonBan where SoHDB = 'HDB100';
select * from tChiTietHDB where SoHDB = 'HDB100';
drop procedure tt_B7;

```

Kết quả:

SoHDB	MaNV	NgayBan	MaKH	SoSanPham	TongTien
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SoHDB	MaSach	SLBan	KhuyenMai
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Bài 8:

Code:

```
create procedure tt_B8 @nam int, @soluongsachnhap int output, @soluongsachban int output
as
begin
    select @soluongsachnhap = SUM(tChiTietHDN.SLNhap)
    from tChiTietHDN, tHoaDonNhap
    where YEAR(tHoaDonNhap.NgayNhap) = @nam and tHoaDonNhap.SoHDN = tChiTietHDN.SoHDN;

    select @soluongsachban = SUM(tChiTietHDB.SLBan)
    from tChiTietHDB, tHoaDonBan
    where YEAR(tHoaDonBan.NgayBan) = @nam and tHoaDonBan.SoHDB = tChiTietHDB.SoHDB;
end;

declare @sln int, @slsb int;
exec tt_B8 2014, @sln output, @slsb output;
print @sln;
print @slsb;
drop procedure tt_B8;
```

Kết quả:

```
175
119
```

Completion time: 2025-10-07T18:40:53.6831974+07:00

Bài 9:

Code:

```
create procedure tt_B9 @masach nvarchar(255), @nam int, @soluongsachnhap int output,
@soluongsachban int output
as
begin
```

```

        select @soluongsachnhap = SUM(tChiTietHDN.SLNhap)
        from tChiTietHDN, tHoaDonNhap
        where YEAR(tHoaDonNhap.NgayNhap) = @nam and tHoaDonNhap.SoHDN = tChiTietHDN.SoHDN
and tChiTietHDN.MaSach = @masach;

        select @soluongsachban = SUM(tChiTietHDB.SLBan)
        from tChiTietHDB, tHoaDonBan
        where YEAR(tHoaDonBan.NgayBan) = @nam and tHoaDonBan.SoHDB = tChiTietHDB.SoHDB and
tChiTietHDB.MaSach = @masach;
end;

declare @slns int, @slsb int;
exec tt_B9 'S01', 2014, @slns output, @slsb output;
print @slns;
print @slsb;
drop procedure tt_B9;

```

Kết quả:

```

120
11

Completion time: 2025-10-07T18:42:11.7000439+07:00

```

Bài 10:

Code:

```

create procedure tt_B10 @makh nvarchar(255), @nam int, @soluongsachmua int output,
@soluongtientieu float output
as
begin
    select @soluongsachmua = SUM(tChiTietHDB.SLBan)
    from tChiTietHDB, tHoaDonBan
    where YEAR(tHoaDonBan.NgayBan) = @nam and tHoaDonBan.MaKH = @makh and
tHoaDonBan.SoHDB = tChiTietHDB.SoHDB;

    select @soluongtientieu = SUM(tChiTietHDB.SLBan * tSach.DonGiaBan)
    from tChiTietHDB, tHoaDonBan, tSach
    where YEAR(tHoaDonBan.NgayBan) = @nam and tHoaDonBan.MaKH = @makh and
tHoaDonBan.SoHDB = tChiTietHDB.SoHDB and tSach.MaSach = tChiTietHDB.MaSach;
end;

declare @slsm int, @sltt float;
exec tt_B10 'KH01', 2014, @slsm output, @sltt output;
print @slsm;
print @sltt;
drop procedure tt_B10;

```

Kết quả:

```
24
2.631e+006
```

```
Completion time: 2025-10-07T18:42:44.4974446+07:00
```

Bài 11:

Code:

```
create procedure tt_B11 @makh nvarchar(255), @nam int, @soluonghoadon int output,
@soluongtientieu float output
as
begin
    select @soluonghoadon = COUNT(tHoaDonBan.SoHDB)
    from tHoaDonBan
    where YEAR(tHoaDonBan.NgayBan) = @nam and tHoaDonBan.MaKH = @makh;

    select @soluongtientieu = SUM(tChiTietHDB.SLBan * tSach.DonGiaBan)
    from tChiTietHDB, tHoaDonBan, tSach
    where YEAR(tHoaDonBan.NgayBan) = @nam and tHoaDonBan.MaKH = @makh and
tHoaDonBan.SoHDB = tChiTietHDB.SoHDB and tSach.MaSach = tChiTietHDB.MaSach;
end;

declare @slhd int, @sltt float;
exec tt_B11 'KH01', 2014, @slhd output, @sltt output;
print @slhd;
print @sltt;
drop procedure tt_B11;
```

Kết quả:

```
2
2.631e+006
```

```
Completion time: 2025-10-07T18:43:31.4026183+07:00
```

Hàm

Bài 1:

Code:

```
create function h_B1 (@nam int)
returns float
as
begin
    declare @tongsotien float;

    select @tongsotien = SUM(tSach.DonGianhap * tChiTietHDN.SLNhap)
    from tSach
    join tChiTietHDN
    on tSach.MaSach = tChiTietHDN.MaSach
    join tHoaDonNhap
    on tChiTietHDN.SoHDN = tHoaDonNhap.SoHDN
```

```

        where YEAR(tHoaDonNhap.NgayNhap) = @nam

        return @tongsotien;
end;

declare @returnVal float;
set @returnVal = dbo.h_B1(2014);
print @returnVal;
drop function h_B1;

```

Kết quả:

```
1.611e+007
```

```
Completion time: 2025-10-07T19:51:26.8297000+07:00
```

Bài 2:

Code:

```

create function h_B2(@thang int)
returns table
as
return (
    select top 5 tSach.*
    from tSach
    join(
        select tChiTietHDB.MaSach, SUM(tChiTietHDB.SLBan) as SoLuongSachBan
        from tChiTietHDB
        join tHoaDonBan
        on tChiTietHDB.SoHDB = tHoaDonBan.SoHDB
        where MONTH(tHoaDonBan.NgayBan) = @thang
        group by tChiTietHDB.MaSach
    ) as DsBan
    on tSach.MaSach = DsBan.MaSach
    order by SoLuongSachBan
);

select * from h_B2(1);
drop function h_B2;

```

Kết quả:

	MaSach	TenSach	TacGia	MaTheLoai	MaNXB	DonGiaNhap	DonGiaBan	SoLuong	SoTrang	TrongLuong	Anh
1	S01	Sống và khát vọng	Trần Đăng Khoa	TL01	NXB01	100000.00	108000.00	120	365	638 gram	NULL
2	S07	Manchester United - Thiên sử về quỷ đỏ	Jim White	TL03	NXB07	135000.00	149000.00	68	639	720 gram	NULL
3	S06	Giáo trình C++ & lập trình hướng đối tượng	GS. Phạm Văn Ất	TL05	NXB06	64000.00	78000.00	89	496	650 gram	NULL

Bài 3:

Code:

```

create function h_B3(@nam int, @n int)
returns table
as
return(

```



```

select top (@n) tNhanVien.*
from tNhanVien
join (
    select tHoaDonBan.MaNV, SUM(tChiTietHDB.SLBan * tSach.DonGiaBan) as
SoTienBan
    from tHoaDonBan
    join tChiTietHDB
    on tHoaDonBan.SoHDB = tChiTietHDB.SoHDB
    join tSach
    on tChiTietHDB.MaSach = tSach.MaSach
    where YEAR(tHoaDonBan.NgayBan) = @nam
    group by tHoaDonBan.MaNV
) as DsBan
on tNhanVien.MaNV = DsBan.MaNV
order by SoTienBan
);

select * from h_B3(2014, 10);
drop function h_B3;

```

Kết quả:

	MaNV	TenNV	GioiTinh	NgaySinh	DiaChi	DienThoai
1	NV01	Trần Huy	Nam	1990-09-11 00:00:00.000	Hà Nội	0986868686
2	NV06	Nguyễn Hoàng	Nam	1990-04-04 00:00:00.000	Nam Định	0962091660
3	NV04	Phan Cao	Nam	1991-08-12 00:00:00.000	Ninh Bình	0985143235
4	NV02	Thanh Tâm	Nữ	1986-01-12 00:00:00.000	Bắc Ninh	0979657676
5	NV03	Nguyễn Minh	Nam	1989-07-05 00:00:00.000	Hải Dương	0968145689
6	NV05	Bùi Ngọc	Nữ	1987-03-01 00:00:00.000	Thái Bình	0918167892

Bài 4:

Code:

```

create function h_B4(@ngay datetime)
returns table
as
return (
    select *
    from tNhanVien
    where tNhanVien.NgaySinh = @ngay
);

select * from h_B4('1990-09-11 00:00:00.000');
drop function h_B4;

```

Kết quả:

	MaNV	TenNV	GioiTinh	NgaySinh	DiaChi	DienThoai
1	NV01	Trần Huy	Nam	1990-09-11 00:00:00.000	Hà Nội	0986868686

Bài 5:

Code:

```
create function h_B5()
returns table
as
return (
    select cthdn.MaSach
    from tChiTietHDN cthdn
    join tHoaDonNhap hdn
    on cthdn.SoHDN = hdn.SoHDN
    where cthdn.SLNhap >
    (
        (
            select SUM(hdb1.SLBan)
            from (
                select tHoaDonBan.NgayBan, tChiTietHDB.SLBan,
                tChiTietHDB.MaSach
                from tHoaDonBan
                join tChiTietHDB
                on tHoaDonBan.SoHDB = tChiTietHDB.SoHDB
            ) as hdb1
            where cthdn.MaSach = hdb1.MaSach and YEAR(hdb1.NgayBan) =
            YEAR(hdn.NgayNhap) + 1
        )
        +
        (
            select SUM(hdb2.SLBan)
            from (
                select tHoaDonBan.NgayBan, tChiTietHDB.SLBan,
                tChiTietHDB.MaSach
                from tHoaDonBan
                join tChiTietHDB
                on tHoaDonBan.SoHDB = tChiTietHDB.SoHDB
            ) as hdb2
            where cthdn.MaSach = hdb2.MaSach and YEAR(hdb2.NgayBan) =
            YEAR(hdn.NgayNhap) + 2
        )
    );

select * from h_B5();
drop function h_B5;
```

Kết quả:

MaSach

Bài 6:

Code:

```

create function h_B6(@ngay datetime)
returns table
as
return (
    select tHoaDonBan.*, (tChiTietHDB.SLBan * tSach.DonGiaBan) as GiaTri
    from tHoaDonBan
    join tChiTietHDB
    on tHoaDonBan.SoHDB = tChiTietHDB.SoHDB
    join tSach
    on tChiTietHDB.MaSach = tSach.MaSach
    where tHoaDonBan.NgayBan = @ngay
);

select * from h_B6('2014-08-11 00:00:00.000');
drop function h_B6;

```

Kết quả:

	SoHDB	MaNV	NgayBan	MaKH	SoSanPham	TongTien	GiaTri
1	HDB01	NV01	2014-08-11 00:00:00.000	KH01	9	508000	108000.00
2	HDB01	NV01	2014-08-11 00:00:00.000	KH01	9	508000	69000.00
3	HDB01	NV01	2014-08-11 00:00:00.000	KH01	9	508000	178000.00
4	HDB01	NV01	2014-08-11 00:00:00.000	KH01	9	508000	544000.00
5	HDB01	NV01	2014-08-11 00:00:00.000	KH01	9	508000	156000.00

Bài 7:

Code:

```

create function h_B7(@nam int)
returns table
as
return(
    select MONTH(tHoaDonBan.NgayBan) as Thang, SUM(tChiTietHDB.SLBan *
tSach.DonGiaBan) as DoanhThu
    from tHoaDonBan
    join tChiTietHDB
    on tHoaDonBan.SoHDB = tChiTietHDB.SoHDB
    join tSach
    on tSach.MaSach = tChiTietHDB.MaSach
    where YEAR(tHoaDonBan.NgayBan) = @nam
    group by rollup(MONTH(tHoaDonBan.NgayBan))
);

select * from h_B7(2014);
drop function h_B7;

```

Kết quả:

	Thang	DoanhThu
1	3	1388000.00
2	4	3147000.00
3	5	4849000.00
4	6	2289000.00
5	7	1658000.00
6	8	1055000.00
7	NULL	14386000.00

Bài 8:

Code:

```
create function h_B8(@masach nvarchar(255))
returns int
as
begin
    declare @soluong int;
    select @soluong = SoLuong
    from tSach
    where tSach.MaSach = @masach
    return @soluong;
end;

declare @returnVal1 int;
set @returnVal1 = dbo.h_B8('S01');
print @returnVal1;
drop function h_B8;
```

Kết quả:

```
120

Completion time: 2025-10-07T19:53:27.0403608+07:00
```

Bài 9:

Code:

```
create function h_B9(@matl nvarchar(255))
returns table
as
return(
    select tSach.*, dssl.SoluongNhap, dssl.SoluongBan
    from tSach
    join (
        select tSach.MaSach, SUM(tChiTietHDN.SLNhap) as SoLuongNhap,
        SUM(tChiTietHDB.SLBan) as SoLuongBan
        from tSach
        join tChiTietHDN
        on tSach.MaSach = tChiTietHDN.MaSach
        join tChiTietHDB
        on tSach.MaSach = tChiTietHDB.MaSach
```

```

        where tSach.MaTheLoai = @matl
        group by tSach.MaSach
    ) as dssl
    on dssl.MaSach = tSach.MaSach
);

select * from h_B9('TL01');
drop function h_B9;

```

Kết quả:

	MaSach	TenSach	TacGia	MaTheLoai	MaNXB	DonGiaNhap	DonGiaBan	SoLuong	SoTrang	TrongLuong	Anh	SoLuongNhap	SoLuongBan
1	S01	Sống và khát vọng	Trần Đăng Khoa	TL01	NXB01	100000.00	108000.00	120	365	638 gram	NULL	360	26