

Решение задания SQL

1. Необходимо добавить поле(ключ) NDM в таблицу DMS, чтобы связать таблицу Заголовков и таблицу Строки
2. Нормализация

2.1 В таблице DMS поле SORT лишнее, по полю KTOV можно получить SORT запросом из таблицы TOV

2.2 В таблице DMS отсутствует ключевое поле

3. Запросы написаны с учетом добавления поля связи

3.1

```
select g.NTOV as 'Товар', Sum(s.KOL) as 'Количество', Sum(s.KOL * s.CENA) as 'Сумма'
from TOV as g
      join DMS as s on s.KTOV = g.KTOV
      join DMZ as d on d.NDM = s.NDM
where d.PR = 2 and d.DDM = '2014-05-01'
group by d.DDM, d.NDM, g.NTOV
order by 'Сумма' desc;
```

3.2

```
UPDATE [dbo].[DMS]
SET
    [SORT] = g.SORT
FROM [dbo].[TOV] as g
      join [dbo].[DMS] as s on g.KTOV = s.KTOV
```

3.3

```
select d.NTOV, sum(d.KOL) as Ostatok, sum(d.suma) as Summa_ostatok
from
    (SELECT g.NTOV, case when t.PR = 1 then s.KOL else s.KOL*-1 end as KOL,
            case when t.PR = 1 then (s.KOL * s.CENA) else (s.KOL * s.CENA)*-1 end as suma
    FROM [bd].[dbo].[DMS] as s
      join TOV as g on s.KTOV = g.KTOV
      join DMZ as t on s.NDM=t.NDM) d
group by d.NTOV
Order by d.NTOV;
```

3.4

```
insert into dmz(DDM, NDM, PR)
select Getdate(), (select isnull(max(NDM), 0) + 1 from dmz) , case when (select COUNT(*) from dmz d
where d.PR= 2) >= (select COUNT(*) from dmz d where d.PR= 1) then 1 else 2 end;
```

3.5

```
DECLARE @max int, @min int
set @max = (Select max(NDM) from dms)
set @min = (Select min(NDM) from dms)

insert into DMS (KTOV, KOL, CENA, NDM, SORT)
Select KTOV, KOL, CENA, @max, SORT
from dms d
where
    d.NDM = @min
    and d.KTOV not in (
        Select KTOV
        from dms d
        where d.NDM = @max)
```