

Пользовательские функции

а) Скалярная функция, возвращающая выручку аптеки на заданную дату

```
CREATE FUNCTION GetDailyRevenue (  
    @sale_date DATE  
)  
RETURNS MONEY  
AS  
BEGIN  
    DECLARE @revenue MONEY  
  
    SELECT @revenue = SUM(amount)  
    FROM Sales  
    WHERE date = @sale_date  
  
    RETURN ISNULL(@revenue, 0)  
END  
GO
```

```
SELECT dbo.GetDailyRevenue('2025-10-16') as daily_revenue
```

	daily_revenue
1	9301,50

б) Inline-функция, возвращающая список лекарств и их количество, проданных на заданную дату

```
CREATE FUNCTION GetSoldMedicationsByDate (  
    @sale_date DATE  
)  
RETURNS TABLE  
AS  
RETURN (  
    SELECT  
        mt.[name] as medication_name,  
        SUM(mbs.quantity) as total_sold_quantity  
    FROM  
        Sales s JOIN MedicineBatch_Sales mbs ON s.id = mbs.sales_id  
        JOIN MedicineBatch mb ON mbs.medicine_batch_id = mb.id  
        JOIN MedicationType mt ON mb.medicament_type_id = mt.id  
    WHERE  
        s.[date] = @sale_date  
    GROUP BY  
        mt.[name]  
)  
GO
```

```
SELECT * FROM GetSoldMedicationsByDate('2025-10-16')
```

	medication_name	total_sold_quantity
1	Аспирин	3
2	Валерьянка	4
3	Кларитин	3
4	Метформин	2
5	Но-шпа	1
6	Нурофен	2
7	Эналаприл	1

с) Multi-statement-функция, выдающая список лекарств от заданной болезни, имеющих в аптеке с указанием количества упаковок

```
CREATE FUNCTION GetMedicationsForDisease (  
    @disease_name NVARCHAR(20)  
)  
RETURNS @Medications TABLE (  
    medication_name NVARCHAR(50),  
    active_substance NVARCHAR(50),  
    total_packages INT  
)  
AS  
BEGIN  
    INSERT INTO @Medications  
    SELECT  
        mt.[name] as medication_name,  
        mt.active_substance,  
        SUM(mb.quantity) as total_packages  
    FROM  
        Disease d JOIN MedicationType_Disease mtd ON d.id = mtd.disease_id  
        JOIN MedicationType mt ON mtd.medication_type_id = mt.id  
        JOIN MedicineBatch mb ON mt.id = mb.medication_type_id  
    WHERE  
        d.[name] = @disease_name AND mb.quantity > 0  
    GROUP BY  
        mt.[name], mt.active_substance  
  
    RETURN  
END  
GO  
  
SELECT * FROM GetMedicationsForDisease('Грипп')
```

	medication_name	active_substance	total_packages
1	Аспирин	Ацетилсалициловая кислота	150
2	Нурофен	Ибупрофен	65