Федеральное государственное бюджетное образовательное

учреждение высшего образования

«Саратовский государственный технический университет

имени Гагарина Ю.А.»

Институт прикладных информационных технологий и коммуникаций

Кафедра «Прикладные информационные технологии»

Отчёт по лабораторной работе №3

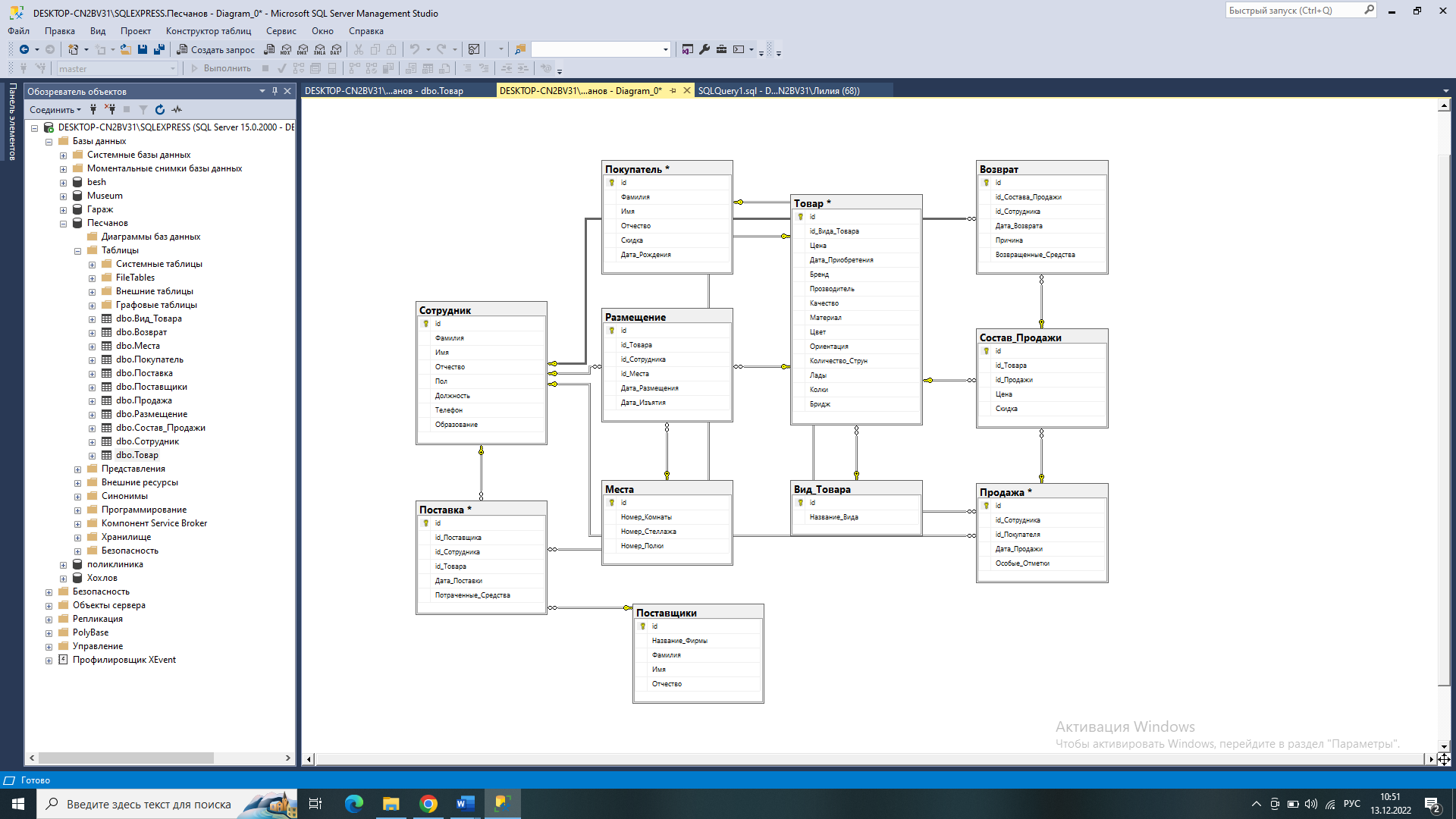
«**Логическая модель данных. Правило целостности**».

Выполнил студент группы б1-ИФСТ-2

Преподаватель:

Иванов Альберт Васильевич

Саратов 2022



USE [Филиппова]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Вид\_Товара] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Вид\_Товара](

[id] [int] NOT NULL,

[Название\_Вида] [varchar](50) NOT NULL,

CONSTRAINT [PK\_Вид\_Товара] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Вид\_Товара] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Возврат] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Возврат](

[id] [int] NOT NULL,

[id\_Состава\_Продажи] [int] NOT NULL,

[id\_Сотрудника] [int] NOT NULL,

[Дата\_Возврата] [datetime] NOT NULL,

[Причина] [varchar](50) NULL,

[Возвращенные\_Средства] [money] NOT NULL,

CONSTRAINT [PK\_Возврат] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Возврат] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Места] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Места](

[id] [int] NOT NULL,

[Номер\_Комнаты] [int] NOT NULL,

[Номер\_Стеллажа] [int] NOT NULL,

[Номер\_Полки] [int] NOT NULL,

CONSTRAINT [PK\_Места] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Места] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Покупатель] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Покупатель](

[id] [int] NOT NULL,

[Фамилия] [varchar](50) NOT NULL,

[Имя] [varchar](50) NOT NULL,

[Отчество] [varchar](50) NOT NULL,

[Скидка] [int] NULL,

[Дата\_Рождения] [date] NOT NULL,

CONSTRAINT [PK\_Покупатель\_1] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Покупатель] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Поставка] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Поставка](

[id] [int] NOT NULL,

[id\_Поставщика] [int] NOT NULL,

[id\_Сотрудника] [int] NOT NULL,

[id\_Товара] [int] NOT NULL,

[Дата\_Поставки] [datetime] NOT NULL,

[Потраченные\_Средства] [money] NOT NULL,

CONSTRAINT [PK\_Поставка] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Поставка] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Поставщики] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Поставщики](

[id] [int] NOT NULL,

[Название\_Фирмы] [varchar](50) NOT NULL,

[Фамилия] [varchar](50) NOT NULL,

[Имя] [varchar](50) NOT NULL,

[Отчество] [varchar](50) NOT NULL,

CONSTRAINT [PK\_Поставщик] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Поставщики] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Продажа] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Продажа](

[id] [int] NOT NULL,

[id\_Сотрудника] [int] NOT NULL,

[id\_Покупателя] [int] NOT NULL,

[Дата\_Продажи] [datetime] NOT NULL,

[Особые\_Отметки] [varchar](50) NULL,

CONSTRAINT [PK\_Продажа] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Продажа] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Размещение] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Размещение](

[id] [int] NOT NULL,

[id\_Товара] [int] NOT NULL,

[id\_Сотрудника] [int] NOT NULL,

[id\_Места] [int] NOT NULL,

[Дата\_Размещения] [datetime] NOT NULL,

[Дата\_Изъятия] [datetime] NOT NULL,

CONSTRAINT [PK\_Размещение] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Размещение] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Состав\_Продажи] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Состав\_Продажи](

[id] [int] NOT NULL,

[id\_Товара] [int] NOT NULL,

[id\_Продажи] [int] NOT NULL,

[Цена] [money] NOT NULL,

[Скидка] [int] NULL,

CONSTRAINT [PK\_Состав\_Продажи] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Состав\_Продажи] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Сотрудник] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Сотрудник](

[id] [int] NOT NULL,

[Фамилия] [varchar](50) NOT NULL,

[Имя] [varchar](50) NOT NULL,

[Отчество] [varchar](50) NOT NULL,

[Пол] [varchar](10) NOT NULL,

[Должность] [varchar](50) NOT NULL,

[Телефон] [varchar](50) NULL,

[Образование] [varchar](50) NOT NULL,

CONSTRAINT [PK\_Сотрудник] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Сотрудник] ON

GO

/\*\*\*\*\*\* Object: Table [dbo].[Товар] Script Date: 13.12.2023 10:44:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Товар](

[id] [int] NOT NULL,

[id\_Вида\_Товара] [int] NOT NULL,

[Цена] [int] NOT NULL,

[Дата\_Приобретения] [datetime] NOT NULL,

[Бренд] [varchar](50) NOT NULL,

[Прозводитель] [varchar](50) NOT NULL,

[Качество] [varchar](50) NOT NULL,

[Материал] [varchar](50) NOT NULL,

[Цвет] [varchar](50) NOT NULL,

[Ориентация] [varchar](50) NULL,

[Количество\_Струн] [varchar](50) NULL,

[Лады] [varchar](50) NULL,

[Колки] [varchar](50) NULL,

[Бридж] [varchar](50) NULL,

CONSTRAINT [PK\_Товар] PRIMARY KEY CLUSTERED

(

[id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

SET IDENTITY\_INSERT [dbo].[ Товар] ON

GO

ALTER TABLE [dbo].[Возврат] ADD CONSTRAINT [DK\_Возврат\_Причина] DEFAULT ('сломался')

FOR [Причина]

GO

ALTER TABLE [dbo].[Возврат] WITH CHECK ADD CONSTRAINT [FK\_Возврат\_Состав\_Продажи] FOREIGN KEY([id\_Состава\_Продажи])

REFERENCES [dbo].[Состав\_Продажи] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Возврат] CHECK CONSTRAINT [FK\_Возврат\_Состав\_Продажи]

GO

ALTER TABLE [dbo].[Возврат] WITH CHECK ADD CONSTRAINT [FK\_Возврат\_Сотрудник] FOREIGN KEY([id\_Сотрудника])

REFERENCES [dbo].[Сотрудник] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Возврат] CHECK CONSTRAINT [FK\_Возврат\_Сотрудник]

GO

ALTER TABLE [dbo].[Поставка] WITH CHECK ADD CONSTRAINT [FK\_Поставка\_Поставщик] FOREIGN KEY([id\_Поставщика])

REFERENCES [dbo].[Поставщики] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Поставка] CHECK CONSTRAINT [FK\_Поставка\_Поставщик]

GO

ALTER TABLE [dbo].[Поставка] WITH CHECK ADD CONSTRAINT [FK\_Поставка\_Сотрудник] FOREIGN KEY([id\_Сотрудника])

REFERENCES [dbo].[Сотрудник] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Поставка] CHECK CONSTRAINT [FK\_Поставка\_Сотрудник]

GO

ALTER TABLE [dbo].[Продажа] WITH CHECK ADD CONSTRAINT [FK\_Продажа\_Сотрудник] FOREIGN KEY([id\_Сотрудника])

REFERENCES [dbo].[Сотрудник] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Продажа] CHECK CONSTRAINT [FK\_Продажа\_Сотрудник]

GO

ALTER TABLE [dbo].[Размещение] WITH CHECK ADD CONSTRAINT [FK\_Размещение\_Места] FOREIGN KEY([id\_Места])

REFERENCES [dbo].[Места] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Размещение] CHECK CONSTRAINT [FK\_Размещение\_Места]

GO

ALTER TABLE [dbo].[размещение] WITH CHECK ADD CONSTRAINT

[CK\_размещение] CHECK (([дата\_размещения] <= [дата\_изъятия]))

GO

ALTER TABLE [dbo].[Размещение] WITH CHECK ADD CONSTRAINT [FK\_Размещение\_Сотрудник] FOREIGN KEY([id\_Сотрудника])

REFERENCES [dbo].[Сотрудник] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Размещение] CHECK CONSTRAINT [FK\_Размещение\_Сотрудник]

GO

ALTER TABLE [dbo].[Размещение] WITH CHECK ADD CONSTRAINT [FK\_Размещение\_Товар] FOREIGN KEY([id\_Товара])

REFERENCES [dbo].[Товар] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Размещение] CHECK CONSTRAINT [FK\_Размещение\_Товар]

GO

ALTER TABLE [dbo].[Состав\_Продажи] WITH CHECK ADD CONSTRAINT [FK\_Состав\_Продажи\_Продажа] FOREIGN KEY([id\_Продажи])

REFERENCES [dbo].[Продажа] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Состав\_Продажи] CHECK CONSTRAINT [FK\_Состав\_Продажи\_Продажа]

GO

ALTER TABLE [dbo].[Состав\_Продажи] WITH CHECK ADD CONSTRAINT [FK\_Состав\_Продажи\_Товар] FOREIGN KEY([id\_Товара])

REFERENCES [dbo].[Товар] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Состав\_Продажи] CHECK CONSTRAINT [FK\_Состав\_Продажи\_Товар]

GO

ALTER TABLE [dbo].[Сотрудник] WITH CHECK ADD CONSTRAINT [DK\_Сотрудник\_Телефон]

DEFAULT ('нету/сломался') FOR [Телефон]

ALTER TABLE [dbo].[Товар] WITH CHECK ADD CONSTRAINT [FK\_Товар\_Вид\_Товара] FOREIGN KEY([id\_Вида\_Товара])

REFERENCES [dbo].[Вид\_Товара] ([id])

ON UPDATE CASCADE

GO

ALTER TABLE [dbo].[Товар] CHECK CONSTRAINT [FK\_Товар\_Вид\_Товара]

GO