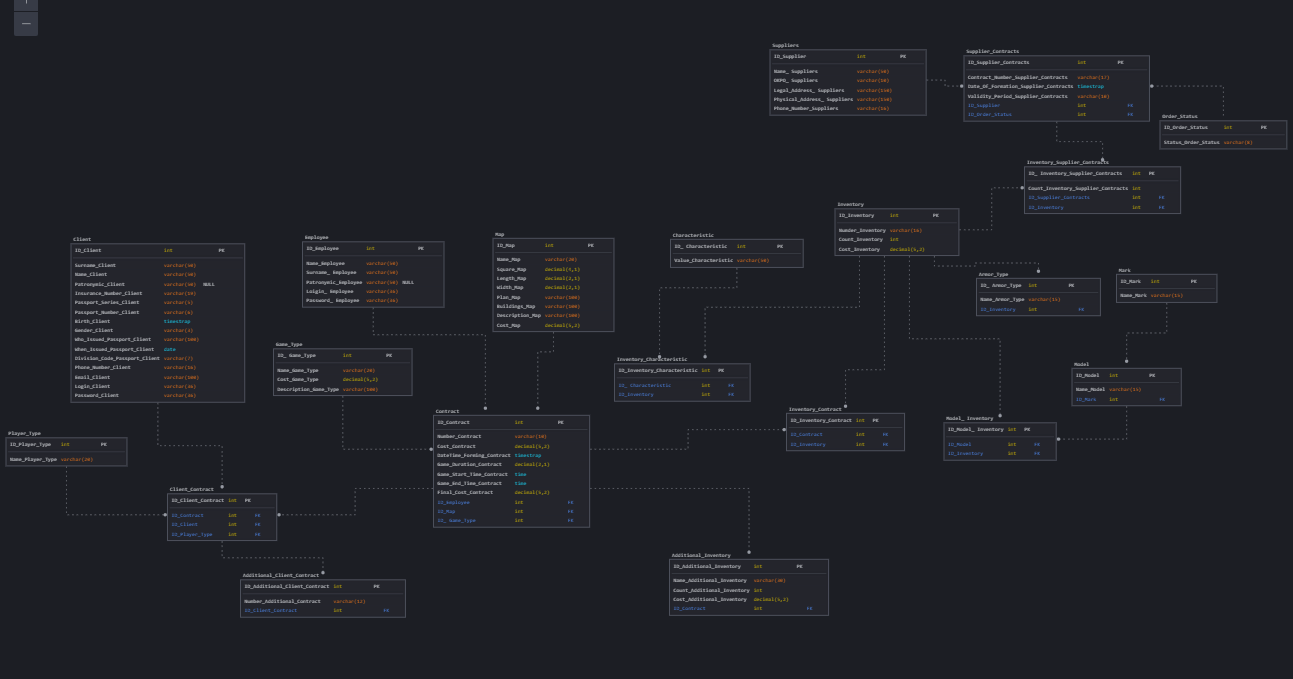
**Этапы выполнения:**

1. Проект даталогической модели данных, на основании 4 практической работы;



1. Реализация скрипта настройки и создания файла базы данных;

|  |  |
| --- | --- |
| Название объекта | Скрипт объекта |
| IIPIIIXXIIAleynichenkoAP | set ansi\_nulls on  go  set ansi\_padding on  go  set quoted\_identifier on  go  create database [IIPIIIXXIIAleynichenkoAP]  go  use [IIPIIIXXIIAleynichenkoAP]  go |

1. На основании словаря данных, произвести реализацию родительских таблиц базы данных (Поле с типом данных, Varchar (max), не может быть с ограничением unique – пометить жёлтым цветом);

| Таблица | Поле | Тип данных | Обязательное | Ограничения | Скрипт | Результат |
| --- | --- | --- | --- | --- | --- | --- |
| Сотрудник(Employee) | ID\_Employee | Serial | Да | Суррогатный ключ | create table [dbo].[Employee]  (  [ID\_Employee] [int] not null identity(1,1),  [Name\_Employee] [varchar](50) not null,  [Surname\_Employee] [varchar](50) not null,  [Patronymic\_Employee] [varchar](50) null default 'Нет данных',  [Login\_Employee] [varchar](255) not null,  [Password\_Employee] [varchar](36) not null,  constraint [PK\_Employee] primary key clustered  ([ID\_Employee] ASC) on [PRIMARY],  constraint [UQ\_Login\_Employee] unique ([Login\_Employee]),  constraint [CH\_Login\_Employee] check (len([Login\_Employee]) >= 6),  constraint [CH\_Password\_Employee] check (len([Password\_Employee]) >= 6 and [Password\_Employee] like '%[a-zA-Z]%' and [Password\_Employee] like '%[0-9]%' and [Password\_Employee] like '%[!@#$%^&\*()]%')  )  go |  |
| Name\_Employee | Varchar(50) | Да |  |
| Surname\_ Employee | Varchar(50) | Да |  |
| Patronymic\_Employee | Varchar(50) | Нет | Default “ Нет данных ” |
| Login\_Employee | Varchar(255) | Да | Length >= 6, Уникальное |
| Password\_ Employee | Varchar(36) | Да | Length >= 6, [a-Z][0-9][!@#$%^&\*()] |
| Клиент(Client) | ID\_Client | Serial | Да | Суррогатный ключ | create table [dbo].[Client]  (  [ID\_Client] [int] not null identity(1,1),  [Surname\_Client] [varchar](50) not null,  [Name\_Client] [varchar](50) not null,  [Patronymic\_Client] [varchar](50) null default 'Нет данных',  [Insurance\_Number\_Client] [varchar](19) not null,  [Passport\_Series\_Client] [varchar](5) not null,  [Passport\_Number\_Client] [varchar](6) not null,  [Birth\_Client] [datetime] not null,  [Gender\_Client] [varchar](3) not null,  [Who\_Issued\_Passport\_Client] [varchar](max) not null,  [When\_Issued\_Passport\_Client] [date] not null,  [Division\_Code\_Passport\_Client] [varchar](7) not null,  [Phone\_Number\_Client] [varchar](16) not null,  [Email\_Client] [varchar](255) not null,  [Login\_Client] [varchar](255) not null,  [Password\_Client] [varchar](36) not null,  constraint [PK\_Client] primary key clustered  ([ID\_Client] ASC) on [PRIMARY],  constraint [UQ\_Insurance\_Number\_Client] unique ([Insurance\_Number\_Client]),  constraint [UQ\_Phone\_Number\_Client] unique ([Phone\_Number\_Client]),  constraint [UQ\_Email\_Client] unique ([Email\_Client]),  constraint [UQ\_Login\_Client] unique ([Login\_Client]),  constraint [CH\_Insurance\_Number\_Client] check ([Insurance\_Number\_Client] like '[0-9][0-9][0-9][0-9] [0-9][0-9][0-9][0-9] [0-9][0-9][0-9][0-9] [0-9][0-9][0-9][0-9]'),  constraint [CH\_Passport\_Series\_Client] check ([Passport\_Series\_Client] like '[0-9][0-9] [0-9][0-9]'),  constraint [CH\_Passport\_Number\_Client] check ([Passport\_Number\_Client] like '[0-9][0-9][0-9][0-9][0-9][0-9]'),  constraint [CH\_Birth\_Client] check ([Birth\_Client] <= dateadd(year, -17, getdate())),  constraint [CH\_Gender\_Client] check ([Gender\_Client] in ('Муж', 'Жен')),  constraint [CH\_When\_Issued\_Passport\_Client] check ([When\_Issued\_Passport\_Client] >= dateadd(year, -14, getdate())),  constraint [CH\_Division\_Code\_Passport\_Client] check ([Division\_Code\_Passport\_Client] like '[0-9][0-9][0-9]-[0-9][0-9][0-9]'),  constraint [CH\_Phone\_Number\_Client] check ([Phone\_Number\_Client] like '+7([0-9][0-9][0-9])[0-9][0-9][0-9]-[0-9][0-9]-[0-9][0-9]'),  constraint [CH\_Email\_Client] check ([Email\_Client] like '%\_@\_\_%.\_\_%'),  constraint [CH\_Login\_Client] check (len([Login\_Client]) >= 6 and [Login\_Client] like '%[a-zA-Z]%' and [Login\_Client] like '%[0-9]%' and [Login\_Client] like '%[!@#$%^&\*()]%'),  constraint [CH\_Password\_Client] check (len([Password\_Client]) >= 6 and [Password\_Client] like '%[a-zA-Z]%' and [Password\_Client] like '%[0-9]%' and [Password\_Client] like '%[!@#$%^&\*()]%')  )  go |  |
| Surname\_Client | Varchar(50) | Да |  |
| Name\_Client | Varchar(50) | Да |  |
| Patronymic\_Client | Varchar(50) | Нет | Default “ Нет данных” |
| Insurance\_Number\_Client | Varchar(19) | Да | **[0-9]{4} [0-0]{4} [0-9]{4} [0-9]{4}, Уникальное** |
| Passport\_Series\_Client | Varchar(5) | Да | **[0-9]{2} [0-9]{2}** |
| Passport\_Number\_Client | Varchar(6) | Да | **[0-9]{6}** |
| Birth\_Client | Timestrap | Да | >17л Текущая дата |
| Gender\_Client | Varchar(3) | Да | Муж, Жен |
| Who\_Issued\_Passport\_Client | Varchar(MAX) | Да |  |
| When\_Issued\_Passport\_Client | Date | Да | >14л Текущая дата |
| Division\_Code\_Passport\_Client | Varchar(7) | Да | [0-9]{3}-[0-9]{3} |
| Phone\_Number\_Client | Varchar(16) | Да | **+7([0-9]{3})[0-9]{3}-[0-9]{2}-[0-9]{2}**, Уникальное |
| Email\_Client | Varchar(255) | Да | 3 , Уникальное |
| Login\_Client | Varchar(255) | Да | Length >= 6, Уникальное, [a-Z][0-9][!@#$%^&\*()] |
| Password\_Client | Varchar(36) | Да | Length >= 6, [a-Z][0-9][!@#$%^&\*()] |
| Карта(Map) | ID\_Map | Serial | Да | Суррогатный ключ | create table [dbo].[Map]  (  [ID\_Map] [int] not null identity(1,1),  [Name\_Map] [varchar](20) not null,  [Square\_Map] [decimal](5,2) not null,  [Length\_Map] [decimal](5,2) not null,  [Width\_Map] [decimal](5,2) not null,  [Plan\_Map] [varchar](max) not null,  [Buildings\_Map] [varchar](max) null default 'Отсутствует',  [Description\_Map] [varchar](max) not null,  [Cost\_Map] [decimal](10,3) not null,  constraint [PK\_Map] primary key clustered  ([ID\_Map] ASC) on [PRIMARY],  constraint [UQ\_Name\_Map] unique ([Name\_Map]),  constraint [CH\_Square\_Map] check ([Square\_Map] > 0),  constraint [CH\_Length\_Map] check ([Length\_Map] > 0),  constraint [CH\_Width\_Map] check ([Width\_Map] > 0),  constraint [CH\_Cost\_Map] check ([Cost\_Map] >= 0)  )  go |  |
| Name\_Map | Varchar(20) | Да | Уникальное |
| Square\_Map | Decimal(5,2) | Да | >0 |
| Length\_Map | Decimal(5,2) | Да | >0 |
| Width\_Map | Decimal(5,2) | Да | >0 |
| Plan\_Map | Varchar(MAX) | Да |  |
| Buildings\_Map | Varchar(MAX) | Нет | Default “Отсутствует” |
| Description\_Map | Varchar(MAX) | Да |  |
| Cost\_Map | Decimal(10,3) | Да | >=0 |
| Тип игры(Game\_Type) | ID\_ Game\_Type | Serial | Да | Суррогатный ключ | create table [dbo].[Game\_Type]  (  [ID\_Game\_Type] [int] not null identity(1,1),  [Name\_Game\_Type] [varchar](20) not null,  [Cost\_Game\_Type] [decimal](10,3) not null,  [Description\_Game\_Type] [varchar](max) not null,  constraint [PK\_Game\_Type] primary key clustered  ([ID\_Game\_Type] ASC) on [PRIMARY],  constraint [UQ\_Name\_Game\_Type] unique ([Name\_Game\_Type]),  constraint [CH\_Cost\_Game\_Type] check ([Cost\_Game\_Type] >= 0)  )  go |  |
| Name\_Game\_Type | Varchar(20) | Да | Уникальное |
| Cost\_Game\_Type | Decimal(10,3) | Да | >=0 |
| Description\_Game\_Type | Varchar(MAX) | Да |  |
| Инвентарь(Inventory) | ID\_Inventory | Serial | Да | Суррогатный ключ | create table [dbo].[Inventory]  (  [ID\_Inventory] [int] not null identity(1,1),  [Number\_Inventory] [varchar](16) not null,  [Count\_Inventory] [int] not null,  [Cost\_Inventory] [decimal](10,3) not null,  constraint [PK\_Inventory] primary key clustered  ([ID\_Inventory] ASC) on [PRIMARY],  constraint [UQ\_Number\_Inventory] unique ([Number\_Inventory]),  constraint [CH\_Number\_Inventory] check ([Number\_Inventory] like 'ИнВ-[0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9]'),  constraint [CH\_Count\_Inventory] check ([Count\_Inventory] >= 0),  constraint [CH\_Cost\_Inventory] check ([Cost\_Inventory] >= 0)  )  go |  |
| Number\_Inventory | Varchar(16) | Да | Уникальный, ИнВ-[0-9]{8} |
| Count\_Inventory | Int | Да | >=0 |
| Cost\_Inventory | Decimal(10,3) | Да | >=0 |
| Характеристики(Сharacteristic) | ID\_ Сharacteristic | Serial | Да | Суррогатный ключ | create table [dbo].[Characteristic]  (  [ID\_Characteristic] [int] not null identity(1,1),  [Value\_Characteristic] [varchar](50) not null,  constraint [PK\_Characteristic] primary key clustered  ([ID\_Characteristic] ASC) on [PRIMARY],  constraint [UQ\_Value\_Characteristic] unique ([Value\_Characteristic])  )  go |  |
| Value\_Сharacteristic | Varchar(50) | Да | Уникальное |
| Договор(Contract) | Employee\_ID | Int | Да | Внешний ключ | create table [dbo].[Contract]  (  [Employee\_ID] [int] not null,  [Game\_Type\_ID] [int] not null,  [Map\_ID] [int] not null,  [ID\_Contract] [int] not null identity(1,1),  [Number\_Contract] [varchar](10) not null,  [Cost\_Contract] [decimal](10,3) not null,  [DateTime\_Forming\_Contract] [datetime] not null,  [Game\_Duration\_Contract] [decimal](5,2) not null,  [Game\_Start\_Time\_Contract] [time] not null,  [Game\_End\_Time\_Contract] [time] not null,  [Final\_Cost\_Contract] [decimal](10,3) not null,  constraint [PK\_Contract] primary key clustered  ([ID\_Contract] ASC) on [PRIMARY],  constraint [UQ\_Number\_Contract] unique ([Number\_Contract]),  constraint [CH\_Number\_Contract] check ([Number\_Contract] like 'GM-[0-9][0-9][0-9][0-9][0-9][0-9][0-9]'),  constraint [CH\_Cost\_Contract] check ([Cost\_Contract] >= 0),  constraint [CH\_Game\_Duration\_Contract] check ([Game\_Duration\_Contract] >= 0),  constraint [CH\_Game\_Start\_Time\_Contract] check ([Game\_Start\_Time\_Contract] > cast([DateTime\_Forming\_Contract] as time)),  constraint [CH\_Game\_End\_Time\_Contract] check ([Game\_End\_Time\_Contract] > [Game\_Start\_Time\_Contract] and [Game\_End\_Time\_Contract] > cast([DateTime\_Forming\_Contract] as time)),  constraint [CH\_Final\_Cost\_Contract] check ([Final\_Cost\_Contract] > 0),  constraint [FK\_Employee\_Contract] foreign key ([Employee\_ID])  references [dbo].[Employee] ([ID\_Employee]),  constraint [FK\_Game\_Type\_Contract] foreign key ([Game\_Type\_ID])  references [dbo].[Game\_Type] ([ID\_Game\_Type]),  constraint [FK\_Map\_Contract] foreign key ([Map\_ID])  references [dbo].[Map] ([ID\_Map])  )  go |  |
| Game\_Type\_ID | Int | Да | Внешний ключ |
| Map\_ID | Int | Да | Внешний ключ |
| ID\_Contract | Serial | Да | Суррогатный ключ |
| Number\_Contract | Varchar(10) | Да | Уникальный, GM-[0-9]{7} |
| Cost\_Contract | Decimal(10,3) | Да | >=0 |
| DateTime\_Forming\_Contract | Timestrap | Да | Настоящее время |
| Game\_Duration\_Contract | Decimal(5,2) | Да | >=0 |
| Game\_Start\_Time\_Contract | Time | Да | >Время заключения договора |
| Game\_End\_Time\_Contract | Time | Да | > Время начала игры >Время заключения договора |
| Final\_Cost\_Contract | Decimal(10,3) | Да | >0 |
| Клиентский договор(Client\_Contract) | ID\_Client\_Contract | Serial | Да | Суррогатный ключ | create table [dbo].[Client\_Contract]  (  [ID\_Client\_Contract] [int] not null identity(1,1),  [Contract\_ID] [int] not null,  [Client\_ID] [int] not null,  [Player\_Type\_ID] [int] not null,  constraint [PK\_Client\_Contract] primary key clustered  ([ID\_Client\_Contract] ASC) on [PRIMARY],  constraint [FK\_Contract\_Client\_Contract] foreign key ([Contract\_ID])  references [dbo].[Contract] ([ID\_Contract]),  constraint [FK\_Client\_Client\_Contract] foreign key ([Client\_ID])  references [dbo].[Client] ([ID\_Client]),  constraint [FK\_Player\_Type\_Client\_Contract] foreign key ([Player\_Type\_ID])  references [dbo].[Player\_Type] ([ID\_Player\_Type])  )  go |  |
| Contract\_ID | Int | Да | Внешний ключ |
| Client\_ID | Int | Да | Внешний ключ |
| Player\_Type\_ID | Int | Да | Внешний ключ |
| Характеристики Инвентаря(Inventory\_Сharacteristic) | ID\_Inventory\_Сharacteristic | Int | Да | Суррогатный ключ | create table [dbo].[Inventory\_Characteristic]  (  [ID\_Inventory\_Characteristic] [int] not null identity(1,1),  [Inventory\_ID] [int] not null,  [Characteristic\_ID] [int] not null,  constraint [PK\_Inventory\_Characteristic] primary key clustered  ([ID\_Inventory\_Characteristic] ASC) on [PRIMARY],  constraint [FK\_Inventory\_Inventory\_Characteristic] foreign key ([Inventory\_ID])  references [dbo].[Inventory] ([ID\_Inventory]),  constraint [FK\_Characteristic\_Inventory\_Characteristic] foreign key ([Characteristic\_ID])  references [dbo].[Characteristic] ([ID\_Characteristic])  )  go |  |
| Inventory\_ID | Int | Да | Внешний ключ |
| Сharacteristic\_ID | Int | Да | Внешний ключ |
| Инвентарь договоров(Inventory\_Contract) | ID\_Inventory\_Contract | Int | Да | Суррогатный ключ | create table [dbo].[Inventory\_Contract]  (  [ID\_Inventory\_Contract] [int] not null identity(1,1),  [Inventory\_ID] [int] not null,  [Contract\_ID] [int] not null,  constraint [PK\_Inventory\_Contract] primary key clustered  ([ID\_Inventory\_Contract] ASC) on [PRIMARY],  constraint [FK\_Inventory\_Inventory\_Contract] foreign key ([Inventory\_ID])  references [dbo].[Inventory] ([ID\_Inventory]),  constraint [FK\_Contract\_Inventory\_Contract] foreign key ([Contract\_ID])  references [dbo].[Contract] ([ID\_Contract])  )  go |  |
| Inventory\_ID | Int | Да | Внешний ключ |
| Contract\_ID | Int | Да | Внешний ключ |
| Доп Договор клиента(Additional\_Client\_Contract) | ID\_Additional\_Client\_Contract | Int | Да | Суррогатный ключ | create table [dbo].[Additional\_Client\_Contract]  (  [ID\_Additional\_Client\_Contract] [int] not null identity(1,1),  [Number\_Additional\_Contract] [varchar](12) not null,  [Client\_Contract\_ID] [int] not null,  constraint [PK\_Additional\_Client\_Contract] primary key clustered  ([ID\_Additional\_Client\_Contract] ASC) on [PRIMARY],  constraint [UQ\_Number\_Additional\_Contract] unique ([Number\_Additional\_Contract]),  constraint [CH\_Number\_Additional\_Contract] check ([Number\_Additional\_Contract] like 'GM-[0-9][0-9][0-9][0-9][0-9][0-9][0-9]/[0-9]'),  constraint [FK\_Client\_Contract\_Additional\_Client\_Contract] foreign key ([Client\_Contract\_ID])  references [dbo].[Client\_Contract] ([ID\_Client\_Contract])  )  go |  |
| Number\_Additional\_Contract | Varchar(12) | Да | Уникальный, GM-[0-9]{7}/[0-9]{1} |
| Client\_Contract\_ID | Int | Да | Внешний ключ |
| Тип игрока(Player\_Type) | ID\_Player\_Type | Int | Да | Суррогатный ключ | create table [dbo].[Player\_Type]  (  [ID\_Player\_Type] [int] not null identity(1,1),  [Name\_Player\_Type] [varchar](20) not null,  constraint [PK\_Player\_Type] primary key clustered  ([ID\_Player\_Type] ASC) on [PRIMARY],  constraint [UQ\_Name\_Player\_Type] unique ([Name\_Player\_Type]),  constraint [CH\_Name\_Player\_Type] check ([Name\_Player\_Type] in ('Ответственный', 'Участник'))  )  go |  |
| Name\_Player\_Type | Varchar(20) | Да | Уникальный, Ответственны, Участник |
| Вид брони(Armor\_Type) | ID\_ Armor\_Type | Int | Да | Суррогатный ключ | create table [dbo].[Armor\_Type]  (  [ID\_Armor\_Type] [int] not null identity(1,1),  [Inventory\_ID] [int] not null,  [Name\_Armor\_Type] [varchar](15) not null,  constraint [PK\_Armor\_Type] primary key clustered  ([ID\_Armor\_Type] ASC) on [PRIMARY],  constraint [UQ\_Name\_Armor\_Type] unique ([Name\_Armor\_Type]),  constraint [FK\_Inventory\_Armor\_Type] foreign key ([Inventory\_ID])  references [dbo].[Inventory] ([ID\_Inventory])  )  go |  |
| Inventory\_ID | Int | Да | Внешний ключ |
| Name\_Armor\_Type | Varchar(15) | Да | Уникальное |
| Дополнительный инвентарь(Additional\_Inventory) | ID\_Additional\_Inventory | Int | Да | Суррогатный ключ | create table [dbo].[Additional\_Inventory]  (  [ID\_Additional\_Inventory] [int] not null identity(1,1),  [Name\_Additional\_Inventory] [varchar](30) not null,  [Count\_Additional\_Inventory] [int] not null,  [Cost\_Additional\_Inventory] [decimal](10,3) not null,  [Contract\_ID] [int] not null,  constraint [PK\_Additional\_Inventory] primary key clustered  ([ID\_Additional\_Inventory] ASC) on [PRIMARY],  constraint [CH\_Count\_Additional\_Inventory] check ([Count\_Additional\_Inventory] >= 0),  constraint [CH\_Cost\_Additional\_Inventory] check ([Cost\_Additional\_Inventory] >= 0),  constraint [FK\_Contract\_Additional\_Inventory] foreign key ([Contract\_ID])  references [dbo].[Contract] ([ID\_Contract])  )  go |  |
| Name\_Additional\_Inventory | Varchar(30) | Да |  |
| Count\_Additional\_Inventory | Int | Да | >=0 |
| Cost\_Additional\_Inventory | Decimal(10,3) | Да | >=0 |
| Contract\_ID | Int | Да | Внешний ключ |
| Марка(Mark) | ID\_Mark | Int | Да | Суррогатный ключ | create table [dbo].[Mark]  (  [ID\_Mark] [int] not null identity(1,1),  [Name\_Mark] [varchar](15) not null,  constraint [PK\_Mark] primary key clustered  ([ID\_Mark] ASC) on [PRIMARY],  constraint [UQ\_Name\_Mark] unique ([Name\_Mark])  )  go |  |
| Name\_Mark | Varchar(15) | Да | Уникальный |
| Модель(Model) | ID\_Model | Int | Да | Суррогатный ключ | create table [dbo].[Model]  (  [ID\_Model] [int] not null identity(1,1),  [Name\_Model] [varchar](15) not null,  [Mark\_ID] [int] not null,  constraint [PK\_Model] primary key clustered  ([ID\_Model] ASC) on [PRIMARY],  constraint [UQ\_Name\_Model] unique ([Name\_Model]),  constraint [FK\_Mark\_Model] foreign key ([Mark\_ID])  references [dbo].[Mark] ([ID\_Mark])  )  go |  |
| Name\_Model | Varchar(15) | Да | Уникальный |
| Mark\_ID | Int | Да | Внешний ключ |
| модель инвентаря (Mark\_Model\_Inventory) | ID\_ Mark\_Model\_ Inventory | Int | Да | Суррогатный ключ | create table [dbo].[Mark\_Model\_Inventory]  (  [ID\_Mark\_Model\_Inventory] [int] not null identity(1,1),  [Inventory\_ID] [int] not null,  [Model\_ID] [int] not null,  constraint [PK\_Mark\_Model\_Inventory] primary key clustered  ([ID\_Mark\_Model\_Inventory] ASC) on [PRIMARY],  constraint [FK\_Inventory\_Mark\_Model\_Inventory] foreign key ([Inventory\_ID])  references [dbo].[Inventory] ([ID\_Inventory]),  constraint [FK\_Model\_Mark\_Model\_Inventory] foreign key ([Model\_ID])  references [dbo].[Model] ([ID\_Model])  )  go |  |
| Inventory\_ID | Int | Да | Внешний ключ |
| Model\_ID | Int | Да | Внешний ключ |
| Поставщики (Suppliers) | ID\_Supplier | Int | Да | Суррогатный ключ | create table [dbo].[Suppliers]  (  [ID\_Supplier] [int] not null identity(1,1),  [Name\_Suppliers] [varchar](50) not null,  [OKPO\_Suppliers] [varchar](10) not null,  [Legal\_Address\_Suppliers] [varchar](max) not null,  [Physical\_Address\_Suppliers] [varchar](max) not null,  [Phone\_Number\_Suppliers] [varchar](16) not null,  constraint [PK\_Suppliers] primary key clustered  ([ID\_Supplier] ASC) on [PRIMARY],  constraint [UQ\_Name\_Suppliers] unique ([Name\_Suppliers]),  constraint [UQ\_OKPO\_Suppliers] unique ([OKPO\_Suppliers]),  constraint [UQ\_Phone\_Number\_Suppliers] unique ([Phone\_Number\_Suppliers]),  constraint [CH\_OKPO\_Suppliers] check ([OKPO\_Suppliers] like '[0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9]'),  constraint [CH\_Phone\_Number\_Suppliers] check ([Phone\_Number\_Suppliers] like '+7([0-9][0-9][0-9])[0-9][0-9][0-9]-[0-9][0-9]-[0-9][0-9]')  )  go |  |
| Name\_ Suppliers | Varchar(50) | Да | Уникальное |
| OKPO\_ Suppliers | Varchar(10) | Да | Уникальное, [0-9]{8-10} |
| Legal\_Address\_ Suppliers | Varchar(MAX) | Да |  |
| Physical\_Address\_ Suppliers | Varchar(MAX) | Да |  |
| Phone\_Number\_Suppliers | Varchar(16) | Да | **+7([0-9]{3})[0-9]{3}-[0-9]{2}-[0-9]{2}**, Уникальное |
| **Статус заказа (**Order\_Status**)** | ID\_Order\_Status | Int | Да | Суррогатный ключ | create table [dbo].[Order\_Status]  (  [ID\_Order\_Status] [int] not null identity(1,1),  [Status\_Order\_Status] [varchar](8) not null,  constraint [PK\_Order\_Status] primary key clustered  ([ID\_Order\_Status] ASC) on [PRIMARY],  constraint [UQ\_Status\_Order\_Status] unique ([Status\_Order\_Status]),  constraint [CH\_Status\_Order\_Status] check ([Status\_Order\_Status] in ('открыт', 'завершён'))  )  go |  |
| Status\_Order\_Status | Varchar(8) | Да | **Уникальное,** открыт, завершён |
| **Договоры Поставщиков(Supplier\_Contracts)** | **ID\_Supplier\_Contracts** | Int | Да | Суррогатный ключ | create table [dbo].[Supplier\_Contracts]  (  [ID\_Supplier\_Contracts] [int] not null identity(1,1),  [Supplier\_ID] [int] not null,  [Contract\_Number\_Supplier\_Contracts] [varchar](17) not null,  [Date\_Of\_Formation\_Supplier\_Contracts] [datetime] not null,  [Validity\_Period\_Supplier\_Contracts] [varchar](30) not null,  [Order\_Status\_ID] [int] not null,  constraint [PK\_Supplier\_Contracts] primary key clustered  ([ID\_Supplier\_Contracts] ASC) on [PRIMARY],  constraint [UQ\_Contract\_Number\_Supplier\_Contracts] unique ([Contract\_Number\_Supplier\_Contracts]),  constraint [CH\_Contract\_Number\_Supplier\_Contracts] check ([Contract\_Number\_Supplier\_Contracts] like 'Д-П/[0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9]/[0-9][0-9]'),  constraint [CH\_Date\_Of\_Formation\_Supplier\_Contracts] check ([Date\_Of\_Formation\_Supplier\_Contracts] <= getdate()),  constraint [CH\_Validity\_Period\_Supplier\_Contracts] check ([Validity\_Period\_Supplier\_Contracts] like '%[0-9]%'),  constraint [FK\_Supplier\_Supplier\_Contracts] foreign key ([Supplier\_ID])  references [dbo].[Suppliers] ([ID\_Supplier]),  constraint [FK\_Order\_Status\_Supplier\_Contracts] foreign key ([Order\_Status\_ID])  references [dbo].[Order\_Status] ([ID\_Order\_Status])  )  go |  |
| Supplier\_ID | Int | Да | Внешний ключ |
| Contract\_Number\_**Supplier\_Contracts** | Varchar(17) | Да | Д-П/[0-9]{10}/[0-9]{2}, Уникальное |
| Date\_Of\_Formation\_**Supplier\_Contracts** | Timestrap | Да | В наст времени |
| Validity\_Period\_**Supplier\_Contracts** | Varchar(30) | Да | >0  в годах, месяцах, годах и месяцах |
| Order\_Status\_ID | Int | Да | Внешний ключ |
| **Инвентари Договоров Поставщиков (**Inventory\_**Supplier\_Contracts)** | ID\_ Inventory\_**Supplier\_Contracts** | Int | Да | Суррогатный ключ | create table [dbo].[Inventory\_Supplier\_Contracts]  (  [ID\_Inventory\_Supplier\_Contracts] [int] not null identity(1,1),  [Inventory\_ID] [int] not null,  [Supplier\_Contracts\_ID] [int] not null,  [Count\_Inventory\_Supplier\_Contracts] [int] not null,  constraint [PK\_Inventory\_Supplier\_Contracts] primary key clustered  ([ID\_Inventory\_Supplier\_Contracts] ASC) on [PRIMARY],  constraint [CH\_Count\_Inventory\_Supplier\_Contracts] check ([Count\_Inventory\_Supplier\_Contracts] > 0),  constraint [FK\_Inventory\_Inventory\_Supplier\_Contracts] foreign key ([Inventory\_ID])  references [dbo].[Inventory] ([ID\_Inventory]),  constraint [FK\_Supplier\_Contracts\_Inventory\_Supplier\_Contracts] foreign key ([Supplier\_Contracts\_ID])  references [dbo].[Supplier\_Contracts] ([ID\_Supplier\_Contracts])  )  go |  |
| Inventory\_ID | Int | Да | Внешний ключ |
| **Supplier\_Contracts\_ID** | Int | Да | Внешний ключ |
| Count\_Inventory\_**Supplier\_Contracts** | Int | Да | **>o** |

1. Продемонстрировать даталогическую модель данных, из инструментальной среды разработки баз данных.

