Data Definition Language (DDL)

(A part of the project submitted to Northeastern University for the course IE6700: Data Management for Analytics Fall 2022)

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The following tables are created using GUI tool in Azure Data Studio along with the Primary Key, and Foreign Key rules. Below are the create scripts that are generated from the tool.

Division

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[division](
    [ID] [tinyint] NOT NULL,
    [NAME] [nvarchar](50) NOT NULL,
    [DIVHEAD_ID] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[division] ADD  CONSTRAINT [PK_division]
PRIMARY KEY CLUSTERED
(
    [ID] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
```

Revenue

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[revenue](
    [div_id] [tinyint] NOT NULL,
    [month] [date] NOT NULL,
    [revenue] [bigint] NOT NULL
) ON [PRIMARY]
```

```
GO
ALTER TABLE [DMA].[revenue] ADD  CONSTRAINT [PK_revenue] PRIMARY
KEY CLUSTERED
(
    [div_id] ASC,
    [month] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[revenue]  WITH CHECK ADD  CONSTRAINT [FK_1]
FOREIGN KEY([div_id])
REFERENCES [DMA].[division] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[revenue] CHECK CONSTRAINT [FK_1]
GO
```

Service

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[service](
    [id] [tinyint] NOT NULL,
    [name] [nvarchar](50) NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[service] ADD  CONSTRAINT [PK_service] PRIMARY
KEY CLUSTERED
(
    [id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
```

Div-service-offering

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
```

```
GO
CREATE TABLE [DMA].[div-service-offering](
    [div_id] [tinyint] NOT NULL,
    [service_id] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[div-service-offering] ADD  CONSTRAINT
[PK_div-service-offering] PRIMARY KEY CLUSTERED
(
    [div_id] ASC,
    [service_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[div-service-offering]  WITH CHECK ADD
CONSTRAINT [FK_25] FOREIGN KEY([div_id])
REFERENCES [DMA].[division] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[div-service-offering] CHECK CONSTRAINT
[FK_25]
GO
ALTER TABLE [DMA].[div-service-offering]  WITH CHECK ADD
CONSTRAINT [FK_26] FOREIGN KEY([service_id])
REFERENCES [DMA].[service] ([id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[div-service-offering] CHECK CONSTRAINT
[FK_26]
GO
```

WMservice

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[WMservice](
    [service_id] [tinyint] NOT NULL
) ON [PRIMARY]
GO
```

```
ALTER TABLE [DMA].[WMservice] ADD  CONSTRAINT [PK_WMservice]
PRIMARY KEY CLUSTERED
(
    [service_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[WMservice]  WITH CHECK ADD  CONSTRAINT
[FK_17] FOREIGN KEY([service_id])
REFERENCES [DMA].[service] ([id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[WMservice] CHECK CONSTRAINT [FK_17]
GO
```

AMservice

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[AMservice](
    [service_id] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[AMservice] ADD  CONSTRAINT [PK_AMservice]
PRIMARY KEY CLUSTERED
(
    [service_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[AMservice]  WITH CHECK ADD  CONSTRAINT
[FK_22] FOREIGN KEY([service_id])
REFERENCES [DMA].[service] ([id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[AMservice] CHECK CONSTRAINT [FK_22]
GO
```

Employee

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[employee](
    [ID] [tinyint] NOT NULL,
    [SSN] [int] NOT NULL,
    [name] [nvarchar](50) NOT NULL,
    [role] [nvarchar](50) NOT NULL,
    [date_of_joining] [date] NOT NULL,
    [compensation] [int] NOT NULL,
    [house] [smallint] NOT NULL,
    [street] [nvarchar](50) NOT NULL,
    [state] [nvarchar](50) NOT NULL,
    [zip] [int] NOT NULL,
    [manager_id] [tinyint] NULL,
    [div_id] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[employee] ADD  CONSTRAINT [PK_employee]
PRIMARY KEY CLUSTERED
(
    [ID] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[employee]  WITH CHECK ADD  CONSTRAINT [FK_2]
FOREIGN KEY([manager_id])
REFERENCES [DMA].[employee] ([ID])
GO
ALTER TABLE [DMA].[employee] CHECK CONSTRAINT [FK_2]
GO
ALTER TABLE [DMA].[employee]  WITH CHECK ADD  CONSTRAINT [FK_3]
FOREIGN KEY([div_id])
REFERENCES [DMA].[division] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[employee] CHECK CONSTRAINT [FK_3]
GO
```

Employee-contact

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[employee_contact](
    [employee_id] [tinyint] NOT NULL,
    [contact] [bigint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[employee_contact] ADD  CONSTRAINT
[PK_employee_contact] PRIMARY KEY CLUSTERED
(
    [employee_id] ASC,
    [contact] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[employee_contact]  WITH CHECK ADD  CONSTRAINT
[FK_4] FOREIGN KEY([employee_id])
REFERENCES [DMA].[employee] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[employee_contact] CHECK CONSTRAINT [FK_4]
GO
```

Employee-email

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[employee_email](
    [employee_id] [tinyint] NOT NULL,
    [email] [nvarchar](50) NOT NULL
) ON [PRIMARY]
GO
SET ANSI_PADDING ON
GO
ALTER TABLE [DMA].[employee_email] ADD  CONSTRAINT
[PK_employee_email] PRIMARY KEY CLUSTERED
(
    [employee_id] ASC,
```

```
    [email] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[employee_email]  WITH CHECK ADD  CONSTRAINT
[FK_5] FOREIGN KEY([employee_id])
REFERENCES [DMA].[employee] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[employee_email] CHECK CONSTRAINT [FK_5]
GO
```

Client

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[client](
    [ID] [tinyint] NOT NULL,
    [name] [nvarchar](50) NOT NULL,
    [house] [smallint] NOT NULL,
    [street] [nvarchar](50) NOT NULL,
    [state] [nvarchar](50) NOT NULL,
    [zip] [int] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[client] ADD  CONSTRAINT [PK_client] PRIMARY
KEY CLUSTERED
(
    [ID] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
```

Client-contact

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
```

```
CREATE TABLE [DMA].[client_contact](
    [clientID] [tinyint] NOT NULL,
    [contact] [bigint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[client_contact] ADD  CONSTRAINT
[PK_client_contact] PRIMARY KEY CLUSTERED
(
    [clientID] ASC,
    [contact] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
```

Client-email

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[client_email](
    [clientID] [tinyint] NOT NULL,
    [email] [nvarchar](50) NOT NULL
) ON [PRIMARY]
GO
SET ANSI_PADDING ON
GO
ALTER TABLE [DMA].[client_email] ADD  CONSTRAINT
[PK_client_email] PRIMARY KEY CLUSTERED
(
    [clientID] ASC,
    [email] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[client_email]  WITH CHECK ADD  CONSTRAINT
[FK_6] FOREIGN KEY([clientID])
REFERENCES [DMA].[client] ([ID])
GO
ALTER TABLE [DMA].[client_email] CHECK CONSTRAINT [FK_6]
GO
```

HNI

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[HNI](
    [client_id] [tinyint] NOT NULL,
    [SSN] [int] NOT NULL,
    [date_of_birth] [date] NOT NULL,
    [net_worth] [bigint] NOT NULL,
    [age] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[HNI] ADD  CONSTRAINT [PK_HNI] PRIMARY KEY
CLUSTERED
(
    [client_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[HNI]  WITH CHECK ADD  CONSTRAINT [FK_8]
FOREIGN KEY([client_id])
REFERENCES [DMA].[client] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[HNI] CHECK CONSTRAINT [FK_8]
GO
```

Commoner

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[commoner](
    [client_id] [tinyint] NOT NULL,
    [SSN] [int] NOT NULL,
    [date_of_birth] [date] NOT NULL,
    [total_savings] [int] NOT NULL,
    [credit_score] [smallint] NOT NULL,
    [age] [tinyint] NOT NULL
```

```
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[commoner] ADD  CONSTRAINT [PK_commoner]
PRIMARY KEY CLUSTERED
(
    [client_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
```

CorporateCo

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[corporateCo](
    [client_id] [tinyint] NOT NULL,
    [net_revenue] [int] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[corporateCo] ADD  CONSTRAINT [PK_corporateCo]
PRIMARY KEY CLUSTERED
(
    [client_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
```

WMprovision

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[WMprovision](
    [HNI_id] [tinyint] NOT NULL,
    [WMservice_id] [tinyint] NOT NULL,
    [fee] [smallint] NOT NULL,
    [date] [date] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[WMprovision] ADD  CONSTRAINT [PK_WMprovision]
PRIMARY KEY CLUSTERED
```

```
(
    [HNI_id] ASC,
    [WMservice_id] ASC,
    [fee] ASC,
    [date] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[WMprovision]  WITH CHECK ADD  CONSTRAINT
[FK_16] FOREIGN KEY([HNI_id])
REFERENCES [DMA].[HNI] ([client_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[WMprovision] CHECK CONSTRAINT [FK_16]
GO
ALTER TABLE [DMA].[WMprovision]  WITH CHECK ADD  CONSTRAINT
[FK_18] FOREIGN KEY([WMservice_id])
REFERENCES [DMA].[WMservice] ([service_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[WMprovision] CHECK CONSTRAINT [FK_18]
GO
```

wealthcut

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[wealthcut](
    [HNI_id] [tinyint] NOT NULL,
    [WMmgr_id] [tinyint] NOT NULL,
    [wealthcut] [int] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[wealthcut] ADD  CONSTRAINT [PK_wealthcut]
PRIMARY KEY CLUSTERED
(
    [HNI_id] ASC,
    [WMmgr_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
```

```
GO
ALTER TABLE [DMA].[wealthcut]  WITH CHECK ADD  CONSTRAINT
[FK_12] FOREIGN KEY([HNI_id])
REFERENCES [DMA].[HNI] ([client_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[wealthcut] CHECK CONSTRAINT [FK_12]
GO
ALTER TABLE [DMA].[wealthcut]  WITH CHECK ADD  CONSTRAINT
[FK_13] FOREIGN KEY([WMmgr_id])
REFERENCES [DMA].[wealthManager] ([employee_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[wealthcut] CHECK CONSTRAINT [FK_13]
GO
```

WM_client_mgr

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[WM_client_mgr](
    [HNI_id] [tinyint] NOT NULL,
    [WMmgr_id] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[WM_client_mgr] ADD  CONSTRAINT
[PK_WM_client_mgr] PRIMARY KEY CLUSTERED
(
    [HNI_id] ASC,
    [WMmgr_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[WM_client_mgr]  WITH CHECK ADD  CONSTRAINT
[FK_14] FOREIGN KEY([HNI_id])
REFERENCES [DMA].[HNI] ([client_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[WM_client_mgr] CHECK CONSTRAINT [FK_14]
```

```
GO
ALTER TABLE [DMA].[WM_client_mgr]  WITH CHECK ADD  CONSTRAINT
[FK_15] FOREIGN KEY([WMmgr_id])
REFERENCES [DMA].[wealthManager] ([employee_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[WM_client_mgr] CHECK CONSTRAINT [FK_15]
GO
```

assetManager

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[assetManager](
    [employee_id] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[assetManager] ADD  CONSTRAINT
[PK_assetManager] PRIMARY KEY CLUSTERED
(
    [employee_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[assetManager]  WITH CHECK ADD  CONSTRAINT
[FK_10] FOREIGN KEY([employee_id])
REFERENCES [DMA].[employee] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[assetManager] CHECK CONSTRAINT [FK_10]
GO
```

AMclient_mgr

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[AMclient-mgr](
    [AMclient_id] [tinyint] NOT NULL,
    [AMmgr_id] [tinyint] NOT NULL
```

```
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[AMclient-mgr] ADD  CONSTRAINT [PK_AMclient-
mgr] PRIMARY KEY CLUSTERED
(
    [AMclient_id] ASC,
    [AMmgr_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[AMclient-mgr]  WITH CHECK ADD  CONSTRAINT
[FK_20] FOREIGN KEY([AMclient_id])
REFERENCES [DMA].[AMclient] ([Client_ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[AMclient-mgr] CHECK CONSTRAINT [FK_20]
GO
ALTER TABLE [DMA].[AMclient-mgr]  WITH CHECK ADD  CONSTRAINT
[FK_21] FOREIGN KEY([AMmgr_id])
REFERENCES [DMA].[assetManager] ([employee_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[AMclient-mgr] CHECK CONSTRAINT [FK_21]
GO
```

PCbanker

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[PCbanker](
    [employee_id] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[PCbanker] ADD  CONSTRAINT [PK_PCbanker]
PRIMARY KEY CLUSTERED
(
    [employee_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
```

```
ALTER TABLE [DMA].[PCbanker]  WITH CHECK ADD  CONSTRAINT [FK_9]
FOREIGN KEY([employee_id])
REFERENCES [DMA].[employee] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[PCbanker] CHECK CONSTRAINT [FK_9]
GO
```

PCprovision

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[PCprovision](
    [commoner_id] [tinyint] NOT NULL,
    [pc_service_id] [tinyint] NOT NULL,
    [PCmgr_id] [tinyint] NOT NULL,
    [date] [date] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[PCprovision] ADD  CONSTRAINT [PK_PCprovision]
PRIMARY KEY CLUSTERED
(
    [commoner_id] ASC,
    [pc_service_id] ASC,
    [PCmgr_id] ASC,
    [date] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[PCprovision]  WITH CHECK ADD  CONSTRAINT
[FK_28] FOREIGN KEY([commoner_id])
REFERENCES [DMA].[commoner] ([client_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[PCprovision] CHECK CONSTRAINT [FK_28]
GO
ALTER TABLE [DMA].[PCprovision]  WITH CHECK ADD  CONSTRAINT
[FK_29] FOREIGN KEY([PCmgr_id])
REFERENCES [DMA].[PCbanker] ([employee_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
```

```
ALTER TABLE [DMA].[PCprovision] CHECK CONSTRAINT [FK_29]
GO
ALTER TABLE [DMA].[PCprovision]  WITH CHECK ADD  CONSTRAINT
[FK_30] FOREIGN KEY([pc_service_id])
REFERENCES [DMA].[PCservice] ([service_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[PCprovision] CHECK CONSTRAINT [FK_30]
GO
```

Investment_banker

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[investment_banker](
    [employee_id] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[investment_banker] ADD  CONSTRAINT
[PK_investment_banker] PRIMARY KEY CLUSTERED
(
    [employee_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[investment_banker]  WITH CHECK ADD
CONSTRAINT [FK_7] FOREIGN KEY([employee_id])
REFERENCES [DMA].[employee] ([ID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[investment_banker] CHECK CONSTRAINT [FK_7]
GO
```

Securities

```
SET ANSI_NULLS ON
```

```
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[securities](
    [security_id] [int] NOT NULL,
    [corporateCo_id] [tinyint] NOT NULL,
    [price_per_share] [smallint] NOT NULL,
    [total_quantity] [smallint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[securities] ADD  CONSTRAINT [PK_securities]
PRIMARY KEY CLUSTERED
(
    [security_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
```

securities_purchase

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[security_purchase](
    [security_id] [int] NOT NULL,
    [commoner_id] [tinyint] NOT NULL,
    [date_of_purchase] [date] NOT NULL,
    [quantity] [smallint] NOT NULL,
    [release_date] [date] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[security_purchase] ADD  CONSTRAINT
[PK_security_purchase] PRIMARY KEY CLUSTERED
(
    [security_id] ASC,
    [commoner_id] ASC,
    [date_of_purchase] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[security_purchase]  WITH CHECK ADD
CONSTRAINT [FK_31] FOREIGN KEY([security_id])
REFERENCES [DMA].[securities] ([security_id])
```

```
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[security_purchase] CHECK CONSTRAINT [FK_31]
GO
ALTER TABLE [DMA].[security_purchase]  WITH CHECK ADD
CONSTRAINT [FK_33] FOREIGN KEY([commoner_id])
REFERENCES [DMA].[commoner] ([client_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[security_purchase] CHECK CONSTRAINT [FK_33]
GO
```

Underwriting

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [DMA].[underwriting](
    [IBanker_id] [tinyint] NOT NULL,
    [security_id] [int] NOT NULL,
    [fee_per_share] [tinyint] NOT NULL,
    [lock_in_period] [tinyint] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [DMA].[underwriting] ADD  CONSTRAINT
[PK_underwriting] PRIMARY KEY CLUSTERED
(
    [IBanker_id] ASC,
    [security_id] ASC
)WITH (STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ONLINE = OFF, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO
ALTER TABLE [DMA].[underwriting]  WITH CHECK ADD  CONSTRAINT
[FK_32] FOREIGN KEY([IBanker_id])
REFERENCES [DMA].[investment_banker] ([employee_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[underwriting] CHECK CONSTRAINT [FK_32]
GO
```

```
ALTER TABLE [DMA].[underwriting]  WITH CHECK ADD  CONSTRAINT
[FK_34] FOREIGN KEY([security_id])
REFERENCES [DMA].[securities] ([security_id])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [DMA].[underwriting] CHECK CONSTRAINT [FK_34]
GO
```