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Create EMPLOYEE table:

```
dvtd@dvtd-t14s: ~  
retail=# create table EMPLOYEE(Id int primary key, Ssn int not null, Name varchar(50) not null);  
CREATE TABLE  
retail=# select * from EMPLOYEE;  
  id | ssn | name  
-----  
(0 rows)  
retail=#
```

Create STORE_MANAGER table:

```
dvtd@dvtd-t14s: ~  
retail=# create table STORE_MANAGER(Id int primary key, foreign key (Id) references EMPLOYEE (Id));  
CREATE TABLE  
retail=# select * from STORE_MANAGER;  
  id  
----  
(0 rows)  
retail=#
```

Create FLOOR_CLERK table:

```
dvtd@dvtd-t14s: ~  
retail=# create table FLOOR_CLERK(Id int primary key, foreign key (Id) references EMPLOYEE (Id));  
CREATE TABLE  
retail=# select * from FLOOR_CLERK;  
id  
----  
(0 rows)  
retail=#
```

Create CUSTOMER table:

```
dvtd@dvtd-t14s: ~  
retail=# create table CUSTOMER(Id int primary key, Ssn int not null, Name varchar(50) not null, Phone varchar(50)  
not null, Address varchar(50) not null);  
CREATE TABLE  
retail=# select * from CUSTOMER;  
id | ssn | name | phone | address  
-----  
(0 rows)  
retail=#
```

Create PAYMENT_METHOD table:

```
dvtd@dvtd-t14s: ~  
retail=# create table PAYMENT_METHOD(Name varchar(100) primary key, Description text);  
CREATE TABLE  
retail=# select * from PAYMENT_METHOD;  
  name | description  
-----+-----  
(0 rows)  
retail=#
```

Create PURCHASE table:

```
dvtd@dvtd-t14s: ~  
retail=# create table PURCHASE(Id int primary key, Date date not null, Time time not null, Name varchar(100) not null, foreign key (Name) references PAYMENT_METHOD (Name));  
CREATE TABLE  
retail=# select * from PURCHASE;  
  id | date | time | name  
-----+-----  
(0 rows)  
retail=#
```

Create DISCOUNT_PROGRAM table:

```
dvtd@dvtd-t14s: ~  
retail=# create table DISCOUNT_PROGRAM(Id int primary key, Name varchar(100) not null, Description text);  
CREATE TABLE  
retail=# select * from DISCOUNT_PROGRAM;  
 id | name | description  
-----+-----  
(0 rows)  
retail=#
```

Create SHELF table:

```
dvtd@dvtd-t14s: ~  
retail=# create table SHELF(Id int primary key, Location varchar(50), Area varchar(50));  
CREATE TABLE  
retail=# select * from SHELF;  
 id | location | area  
-----+-----  
(0 rows)  
retail=#
```

Create PRODUCT table:

```
dvtd@dvtd-t14s: ~  
retail=# create table PRODUCT(Id int primary key, Name varchar(50) not null, MDate timestamp not null, EDate timestamp not null, Quantity int not null, SuggestedPrice int not null, constraint CheckValidity check (MDate < EDate and Quantity >= 0));  
CREATE TABLE  
retail=# select * from PRODUCT;  
 id | name | mdate | edate | quantity | suggestedprice  
-----  
(0 rows)  
retail=#
```

Create BRAND table:

```
dvtd@dvtd-t14s: ~  
retail=# create table BRAND(Id int primary key, Name varchar(50) not null);  
CREATE TABLE  
retail=# select * from BRAND;  
 id | name  
-----  
(0 rows)  
retail=#
```

Create TRANSACTION_HISTORY table:

```
dvtd@dvtd-t14s: ~  
retail=# create table TRANSACTION_HISTORY(CustomerId int not null, ProductId int not null, PurchaseId int not null  
, BrandId int not null, Date date not null, Time time not null, Quantity int not null, primary key (CustomerId, Pr  
oductId, Date, Time), foreign key (CustomerId) references Customer (Id), foreign key (ProductId) references Produc  
t (Id), foreign key (PurchaseId) references Purchase (Id), foreign key (BrandId) references Brand (Id));  
CREATE TABLE  
retail=# select * from TRANSACTION_HISTORY;  
 customerid | productid | purchaseid | brandid | date | time | quantity  
-----+-----+-----+-----+-----+-----+-----  
(0 rows)  
retail=#
```

Create BELONGS_TO table:

```
dvtd@dvtd-t14s: ~  
retail=# create table BELONGS_TO(ProductId int not null, BrandId int not null, foreign key (ProductId) references  
Product (Id), foreign key (BrandId) references Brand (Id));  
CREATE TABLE  
retail=# select * from BELONGS_TO;  
 productid | brandid  
-----+-----  
(0 rows)  
retail=#
```

Create RESTOCKS table:

```
dvtd@dvtd-t14s: ~  
retail=# create table RESTOCKS(FloorClerkId int not null, ShelfId int not null, unique (FloorClerkId, ShelfId), fo  
reign key (FloorClerkId) references FLOOR_CLERK(Id), foreign key (ShelfId) references SHELF(Id));  
CREATE TABLE  
retail=# select * from RESTOCKS;  
 floorclerkid | shelfid  
-----+-----  
(0 rows)  
retail=#
```

Create CHECKS table:

```
dvtd@dvtd-t14s: ~  
retail=# create table CHECKS(StoreManagerId int not null, ProductId int not null, unique (StoreManagerId, ProductI  
d), foreign key (StoreManagerId) references STORE_MANAGER (Id), foreign key (ProductId) references PRODUCT (Id));  
CREATE TABLE  
retail=# select * from CHECKS;  
 storemanagerid | productid  
-----+-----  
(0 rows)  
retail=#
```

Create IS_ON table:

```
retail=# create table IS_ON(ProductId int not null, ShelfId int not null, Quantity int not null, foreign key (ProductId) references PRODUCT (Id), foreign key (ShelfId) references SHELF (Id));
CREATE TABLE
retail=# select * from IS_ON;
 productid | shelfid | quantity
-----+-----+-----
(0 rows)

retail=#
```


Create HAS table:

```
dvtd@dvtd-t14s: ~  
retail=# create table HAS(DiscountProgramId int not null, ProductId int not null, BrandId int not null, FromDate t  
imestamp not null, ToDate timestamp not null, Percent int not null, foreign key (DiscountProgramId) references DIS  
COUNT_PROGRAM (Id), foreign key (ProductId) references Product (Id), foreign key (BrandId) references Brand (Id),  
constraint DiscountPercent check(Percent >= 0 and Percent <= 80), constraint DateValidity check(FromDate < ToDate)  
);  
CREATE TABLE  
retail=# select * from HAS;  
 discountprogramid | productid | brandid | fromdate | todate | percent  
-----+-----+-----+-----+-----+-----  
(0 rows)  
retail=#
```

Create STORAGE_CONDITIONS table:

```
dvtd@dvtd-t14s: ~  
retail=# create table STORAGE_CONDITIONS(ShelfId int primary key, StorageCondition varchar(200), foreign key (Shel  
fId) references SHELF (Id));  
CREATE TABLE  
retail=# select * from STORAGE_CONDITIONS;  
 shelfid | storagecondition  
-----+-----  
(0 rows)  
retail=#
```

Create RESTOCKS_SESSION table:

```
dvtd@dvtd-t14s: ~  
retail=# create table RESTOCKS_SESSION(FloorClerkId int not null, ShelfId int not null, Date date not null, Time t  
ime not null, primary key (FloorClerkId, ShelfId, Date, Time), foreign key (FloorClerkId, ShelfId) references REST  
OCKS (FloorClerkId, ShelfId));  
CREATE TABLE  
retail=# select * from RESTOCKS_SESSION;  
 floorclerkid | shelfid | date | time  
-----+-----+-----+-----  
(0 rows)  
retail=#
```

Create CHECKS_SESSION table:

```
dvtd@dvtd-t14s: ~  
retail=# create table CHECKS_SESSION(StoreManagerId int not null, ProductId int not null, Date date not null, Time  
time not null, StorewidePrice int not null, primary key (StoreManagerId, ProductId, Date, Time, StorewidePrice),  
foreign key (StoreManagerId, ProductId) references CHECKS (StoreManagerId, ProductId));  
CREATE TABLE  
retail=# select * from CHECKS_SESSION;  
 storemanagerid | productid | date | time | storewideprice  
-----+-----+-----+-----+-----  
(0 rows)  
retail=#
```

Schema Visualization:

