Relational Database Project

Parts 4&5:Loading data into tables & Creating views

Contents

[Problem Statement 4](#_Toc532389185)

[Analysis (Explanation of “Part4\_Load Data into Tables.sql” file) 5](#_Toc532389186)

[Results (Screenshots of “Part4\_Load Data into Tables.sql” file) 18](#_Toc532389187)

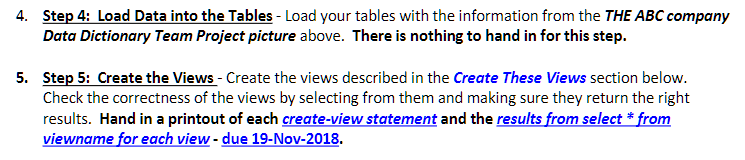
[Analysis (Explanation of “Part5\_Create Views.sql” file) 21](#_Toc532389191)

[Results (See “Part3,4,5 (Rev1).sql” to view the sql code) 45](#_Toc532389192)

[Redone Analysis (Changes in going from Rev1 to Rev2) 46](#_Toc532389193)

[Redone Results (See “Part3,4,5 (Rev2).sql” to view the sql code) 48](#_Toc532389194)

# Problem Statement



# Analysis (Explanation of “Part4\_Load Data into Tables.sql” file)

* From Part3\_Create Table.sql we can see the list of tables containing entities only (excludign relationship tables)

|  |  |
| --- | --- |
| **Part3\_Create Table.sql**  **(containing all the entities tables only)** | **Comments (Does it exist in Part4\_Load Data into Tables.sql)** |
| All Entities | **Yes** it exists on Part4; because ABC Diagram contains entities |
| All Attributes | **Yes** it exists on Part4; because ABC Diagram contains attributes |
| All Keys | **Yes** it exists on Part4; because ABC Diagram contains key attributes |
| Inheritance | **Yes** it exists on Part4; because ABC Diagram contains inheritance relationship |
| Entity Attributes | **No** it doesn’t exist on Part4; using Entity Attributes causes redundant data entry because both (All Entities & Entities Attributes) have the same attribute (AttributeName) as the PK from Part3\_CreateTable.sql |
| Relationship Attributes | **No** it doesn’t exist on Part4; using Entity Attributes causes redundant data entry because both (All Entities & Relationship Attributes) have the same attribute (AttributeName) as the PK from Part3\_CreateTable.sql |
| **Part3\_Create Table.sql (Containing relationship tables only)** | **Comments (Why or why it doesn’t exist in Part4\_Load Data into Tables.sql)** |
| All Relationships | **Yes** it exists on Part4; because ABC Diagram contains relationships |
| AllEntities\_Has\_AllAttributes | **Yes** it exists on Part4; because ABC Diagram contains entities that have attributes |
| AllEntities\_Has\_AllRelationships | **Yes** it exists on Part4; because ABC Diagram contains entities that have relationships |
| AllRelationships\_Has\_RelationshipAttributes | **Yes** it exists on Part4; because ABC Diagram contains relationships that have attributes |
| All AttributesAttributeTypes | **No** it doesn’t exists on Part4;doesn’t model any meaningful or unique characteristics of the ABC Diagram. |
| AllEntities\_Has\_AllKeys | **No** it doesn’t exists on Part4; using AllEntities\_Has\_AllKeys causes redundant data entry because the PK of the AllEntities\_Has\_AllKeys Table is (Entity Name, Attribute Name) which is the same as the PK of (AllEntities & All Attributes) Tables from Part3\_CreateTable.sql |

Filtering the table above to see yes only

|  |  |
| --- | --- |
| **Part3\_Create Table.sql**  **(containing all the entities tables only)** | **Comments (Does it exist in Part4\_Load Data into Tables.sql)** |
| All Entities | **Yes** it exists on Part4; models unique characteristics of the ABC Diagram |
| AllRelationships\_Has\_RelationshipAttributes | **Yes** it exists on Part4; models unique characteristics of the ABC Diagram |
| All Attributes | **Yes** it exists on Part4; models unique characteristics of the ABC Diagram |
| All Keys | **Yes** it exists on Part4; models unique characteristics of the ABC Diagram |
| Inheritance | **Yes** it exists on Part4; models unique characteristics of the ABC Diagram |
| All Relationships | **Yes** it exists on Part4; models unique characteristics of the ABC Diagram |
| AllEntities\_Has\_AllAttributes | **Yes** it exists on Part4; models unique characteristics of the ABC Diagram |
| AllEntities\_Has\_AllRelationships | **Yes** it exists on Part4; models unique characteristics of the ABC Diagram |

* Loading Data into AllEntities Table
  + Extracted entities from the ABC Diagram and loading it as data into the table using INSERT sql statements

|  |
| --- |
| **ABC Diagram** |
|  |
| **SQL Syntax: INSERT INTO <tablename> VALUES <attribute list>** |
| Part3\_Create Tables.sql    Part4\_Load Data into Tables.sql |

* Loading Data into AllRelationships\_Has\_RelationshipAttributes Table
  + Extracted relationship attributes from the ABC Diagram and loading it as data into the table using INSERT sql statements

|  |
| --- |
| **ABC Diagram** |
|  |
| **SQL Syntax: INSERT INTO <tablename> VALUES <attribute list>** |
| Part3\_Create Tables.sql    Part4\_Load Data into Tables.sql |

* Loading Data into AllAttributesTable
  + Extracted entity attributes from the ABC Diagram and loading it as data into the table using INSERT sql statements

|  |
| --- |
| **ABC Diagram** |
|  |
| **SQL Syntax: INSERT INTO <tablename> VALUES <attribute list>** |
| Part3\_Create Tables.sql    Part4\_Load Data into Tables.sql |

* Loading Data into AllAttributesTable
  + Linking the entities to their correct entity attributes based on the ABC Diagram and loading it as data into the table using INSERT sql statements

|  |
| --- |
| **ABC Diagram** |
|  |
| **SQL Syntax: INSERT INTO <tablename> VALUES <attribute list>** |
| Part3\_Create Tables.sql    Part4\_Load Data into Tables.sql |

* Loading Inheritance Relationship Data into Inheritance Table
  + Loading the inheritance relationship (“Employee **IS A** Associate or a Temp Hourly” and also “TempHourly **IS A** Contractor” ) as data into the table using INSERT sql statements

|  |
| --- |
| **ABC Diagram** |
|  |
| **SQL Syntax: INSERT INTO <tablename> VALUES <attribute list>** |
| Part3\_Create Tables.sql    Part4\_Load Data into Tables.sql |

* Loading (Relationship with cardinalities) Data into AllRelationships Table
  + Extracted all the (relationships with cardinalities) from the ABC Diagram and loading it as data into the table using INSERT sql statements

|  |
| --- |
| **ABC Diagram** |
|  |
| **SQL Syntax: INSERT INTO <tablename> VALUES <attribute list>** |
| Part3\_Create Tables.sql    Part4\_Load Data into Tables.sql |

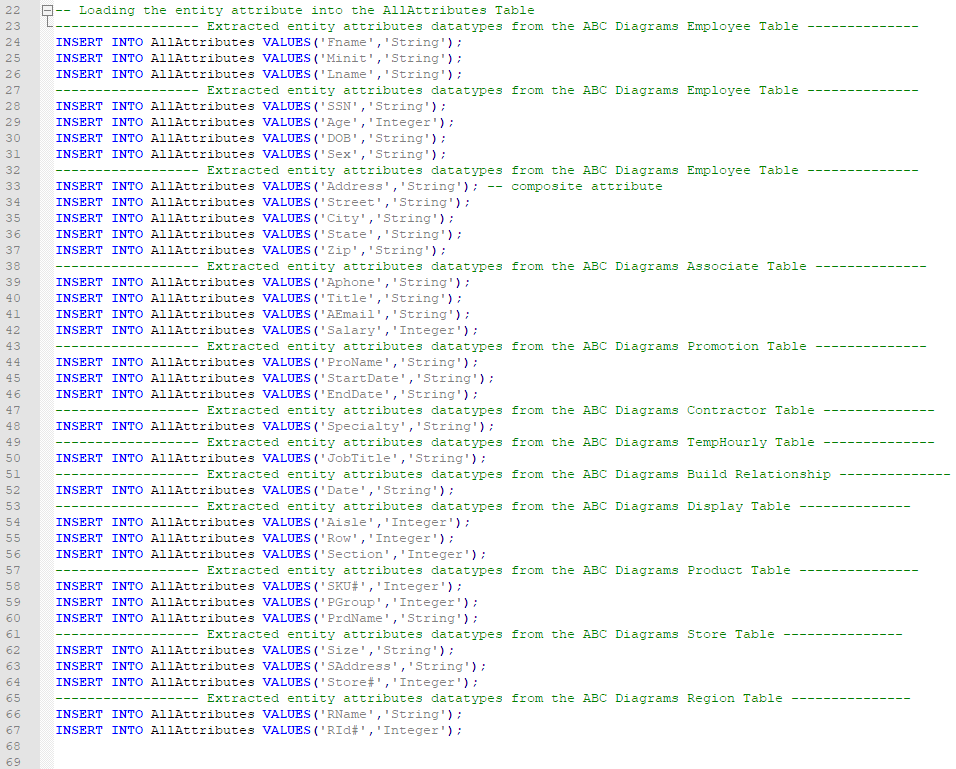
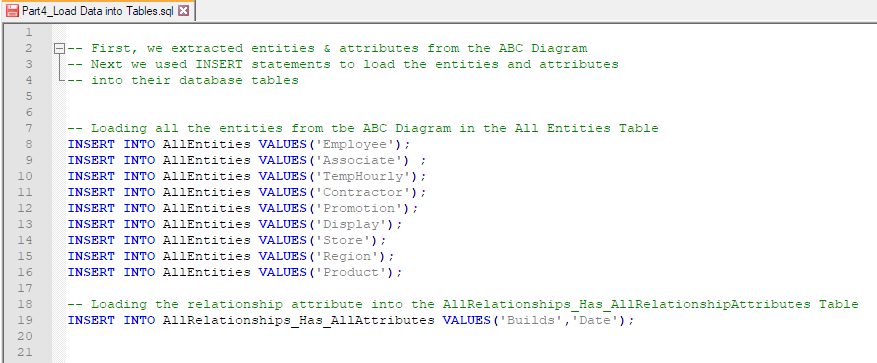
* Loading Data into AllKeysTable
  + Extracted (Keytype, Keyname) attributes for all the key attributes from the ABC Diagram and loading it as data into the table using INSERT sql statements

|  |
| --- |
| **ABC Diagram** |
|  |
| **SQL Syntax: INSERT INTO <tablename> VALUES <attribute list>** |
| Part3\_Create Tables.sql    Part4\_Load Data into Tables.sql |

* Loading Data into AllEntities\_Has\_AllKeys Table
  + Extracted (Entity Name, AttributeName) attributes for all the key attributes from the ABC Diagram and loading it as data into the table using INSERT sql statements

|  |
| --- |
| **ABC Diagram** |
|  |
| **SQL Syntax: INSERT INTO <tablename> VALUES <attribute list>** |
| Part3\_Create Tables.sql    Part4\_Load Data into Tables.sql |

# Results (Screenshots of “Part4\_Load Data into Tables.sql” file)



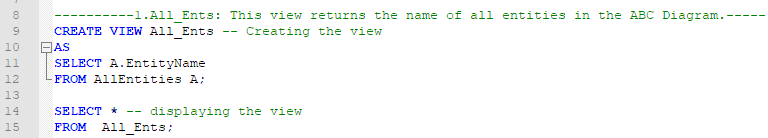
# 

# 

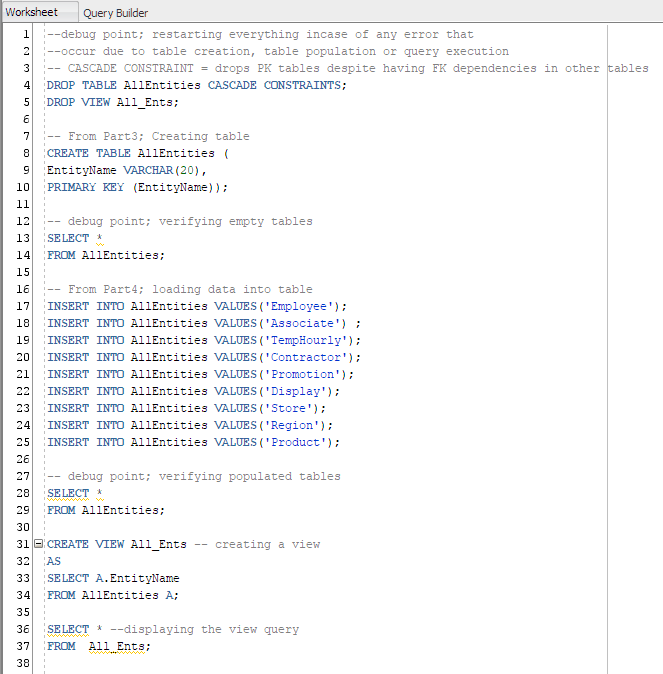
# 

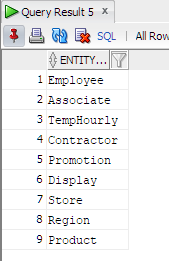
# Analysis (Explanation of “Part5\_Create Views.sql” file)

View1 Query (Screenshot pulled from Part5\_Create Views.sql file)

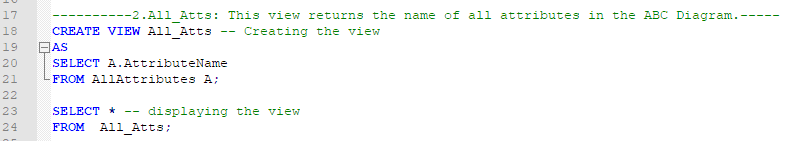


Oracle SQL Developer (Visually verifying View1 queries output)



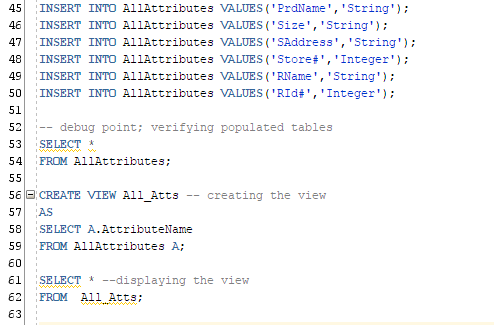


View2 Query (Screenshot pulled from Part5\_Create Views.sql file)



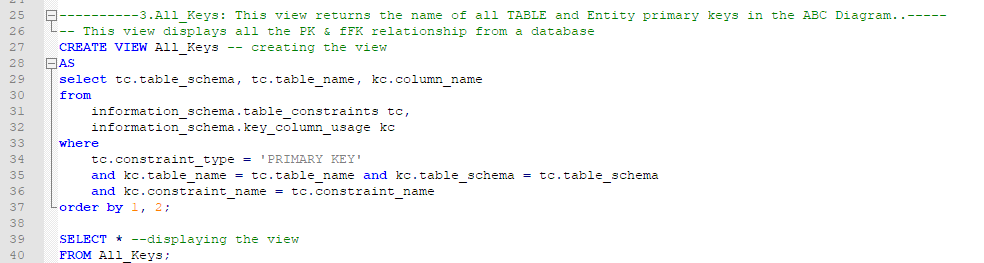
Oracle SQL Developer (Visually verifying View2 queries output)



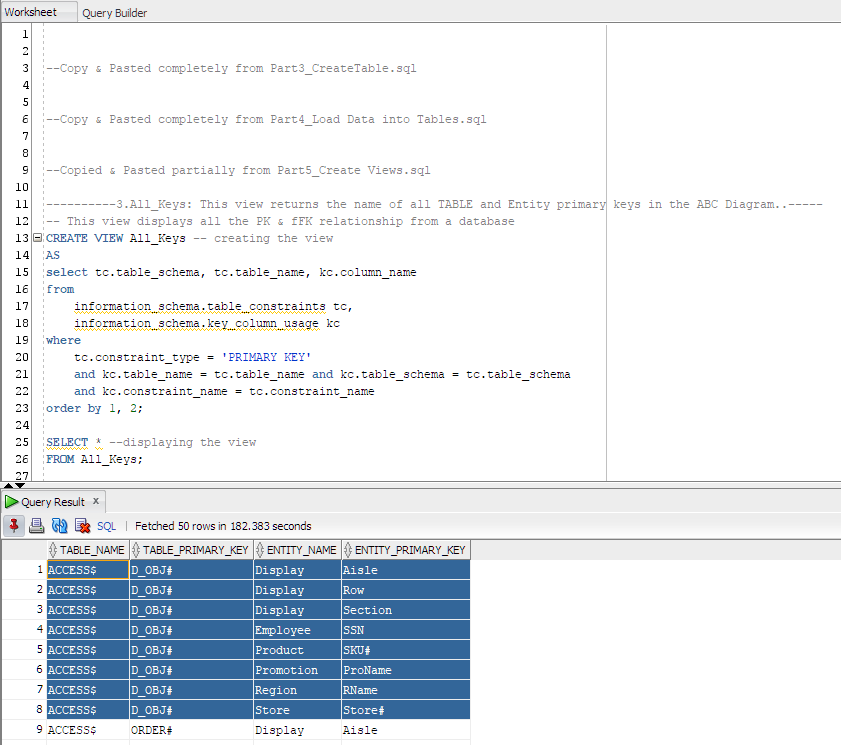


NAME is missing

View3 Query (Screenshot pulled from Part5\_Create Views.sql file)

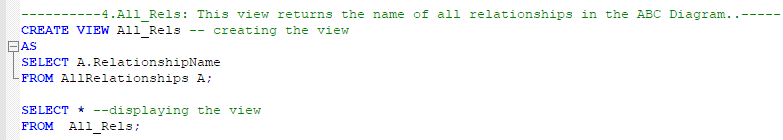


Oracle SQL Developer (Visually verifying View3 queries output)



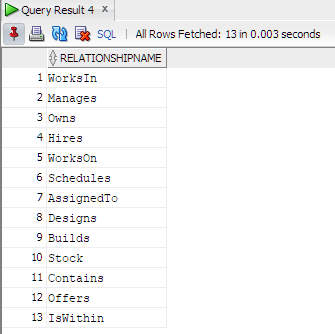
Still MISSING the other underlined attributes from the picture

View4 Query (Screenshot pulled from Part5\_Create Views.sql file)



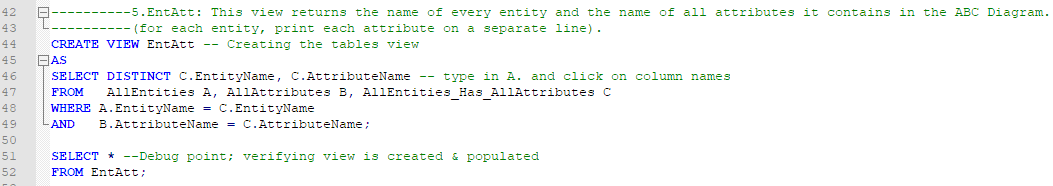
Oracle SQL Developer (Visually verifying View4 queries output)



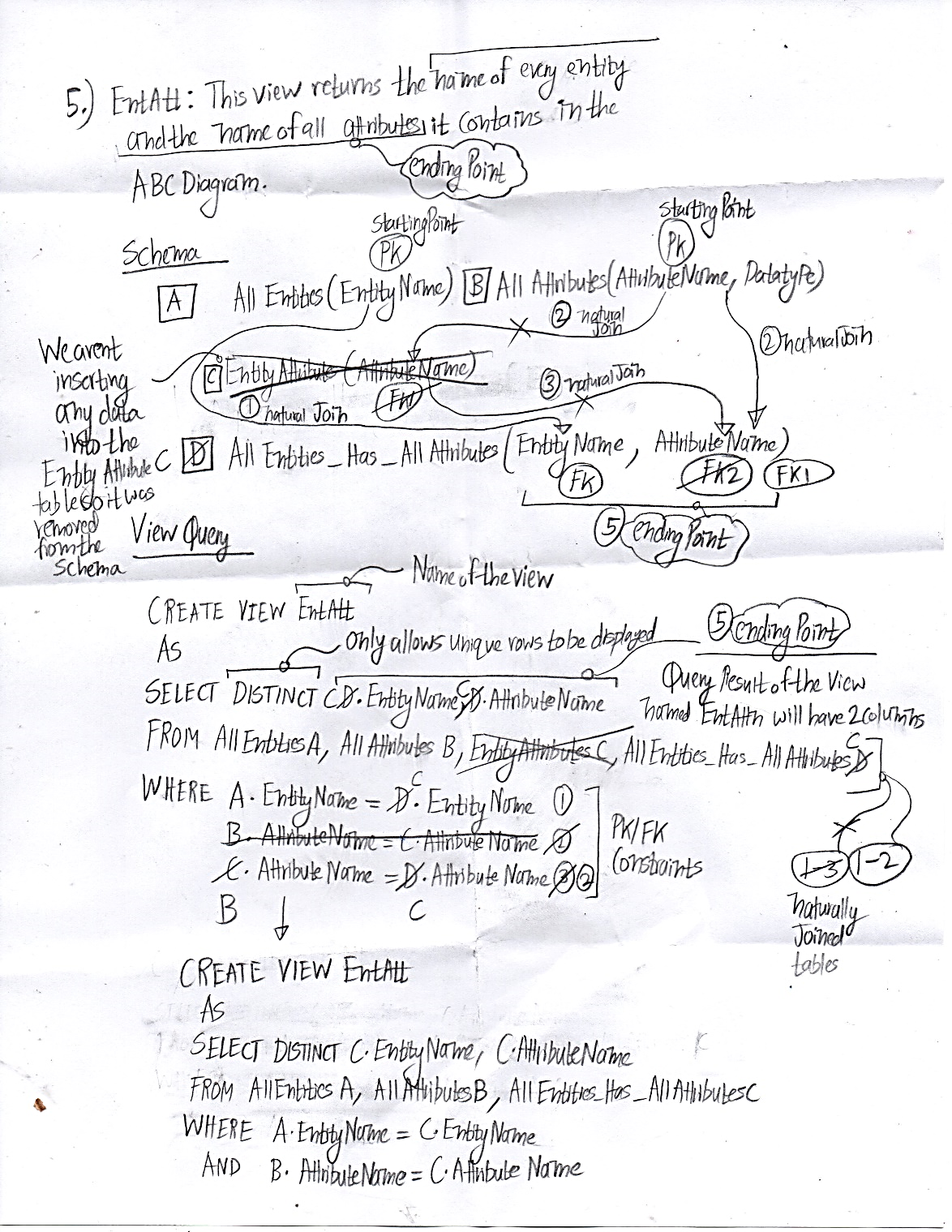


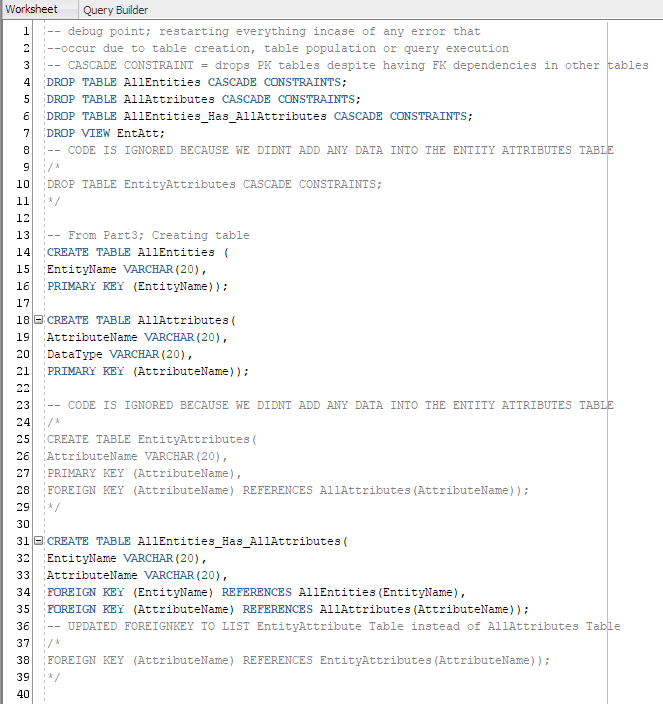
How do you handle the D relationships?

View5 Query (Screenshot pulled from Part5\_Create Views.sql file)



Oracle SQL Developer (Visually verifying View5 queries output)

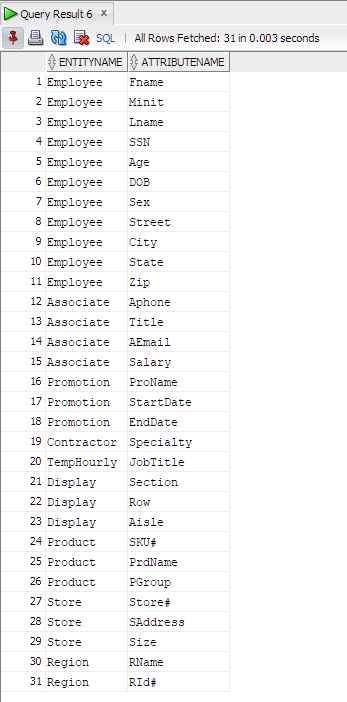






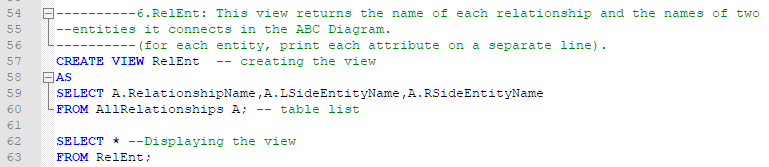




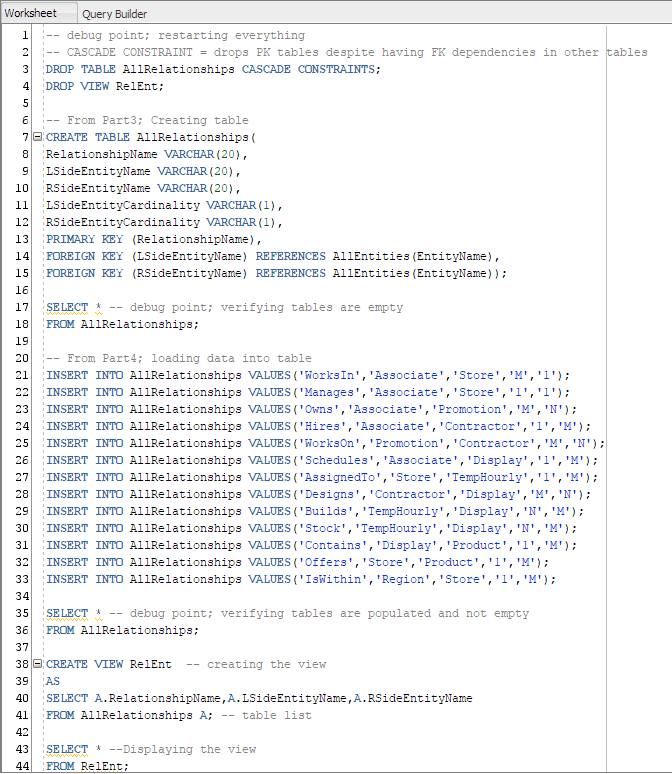


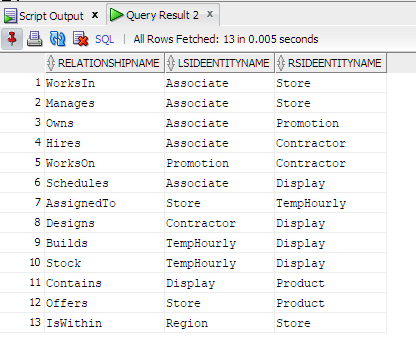
Name and Address are missing

View6 Query (Screenshot pulled from Part5\_Create Views.sql file)



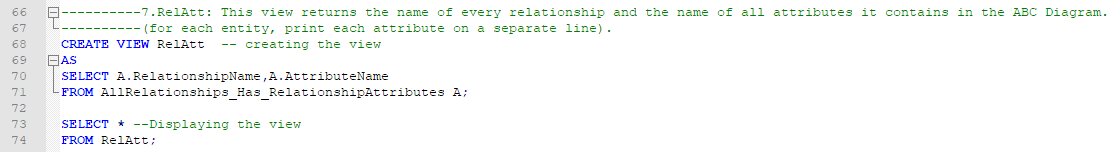
Oracle SQL Developer (Visually verifying View6 queries output)



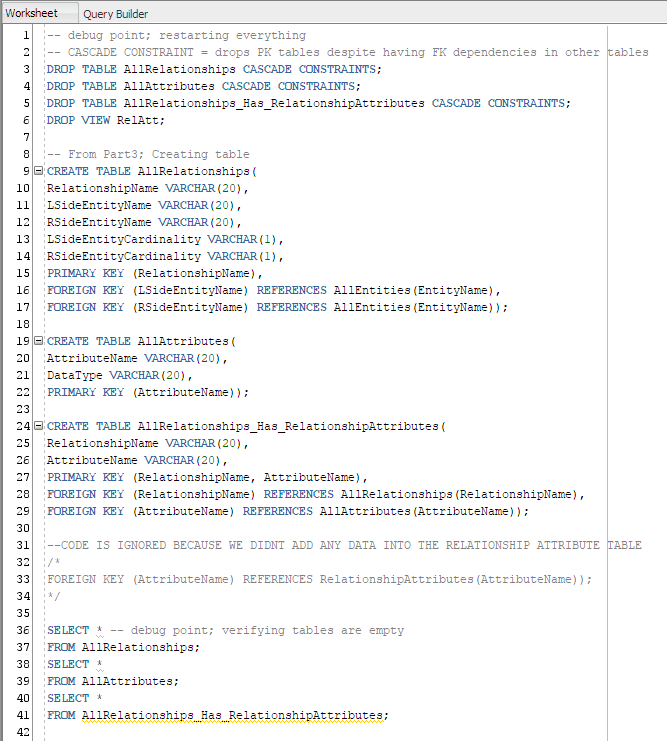


How about the Ds?

View7 Query (Screenshot pulled from Part5\_Create Views.sql file)

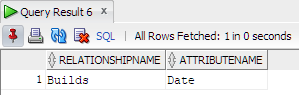


Oracle SQL Developer (Visually verifying View7 queries output)

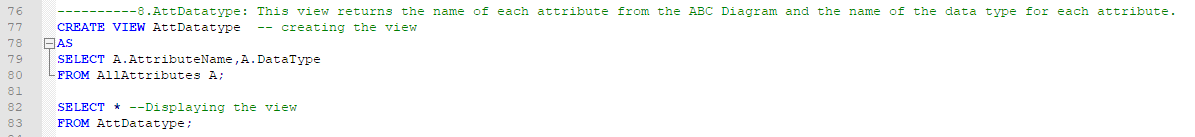






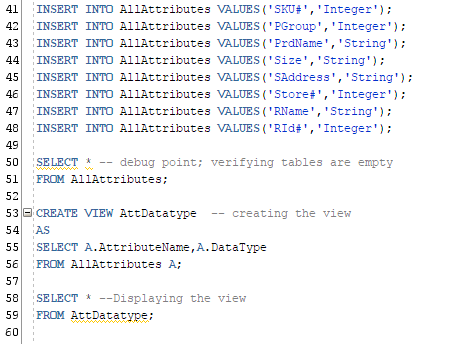


View8 Query (Screenshot pulled from Part5\_Create Views.sql file)



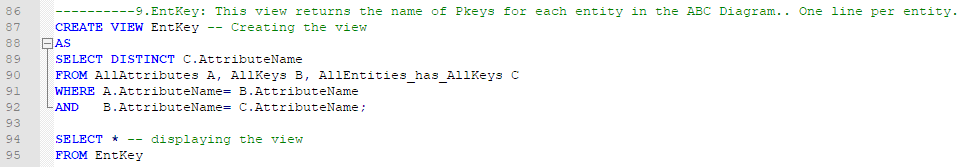
Oracle SQL Developer (Visually verifying View8 queries output)



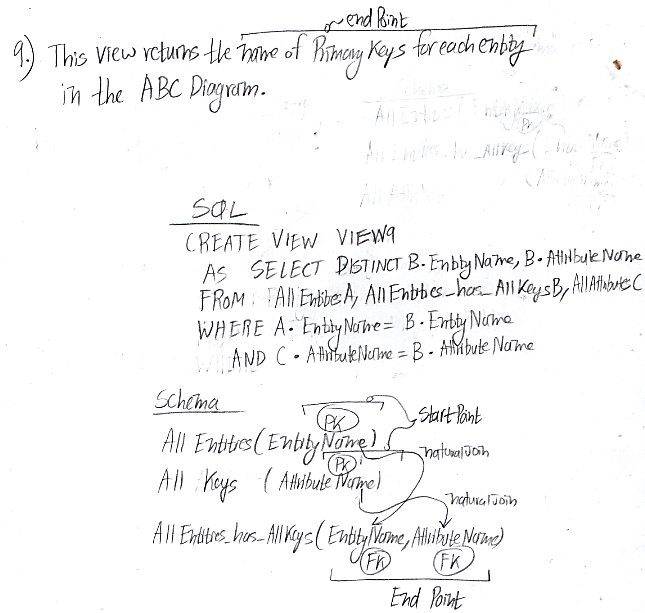


Name is missing

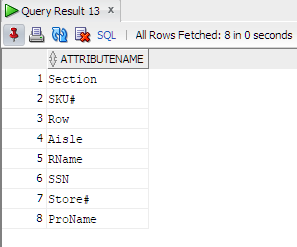
View9 Query (Screenshot pulled from Part5\_Create Views.sql file)



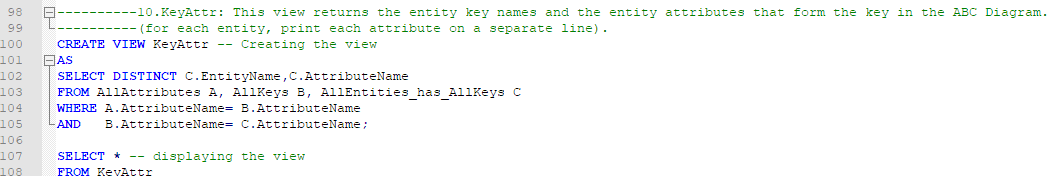
Oracle SQL Developer (Visually verifying View9 queries output)







View10 Query (Screenshot pulled from Part5\_Create Views.sql file)



Oracle SQL Developer (Visually verifying View10 queries output)





