Chris Cole

BUS 440 Project 1

Business Rules

* NTC managed by Conner B Johnson (555) 637-9192
* CSF managed by Mary B. Carter and has a number of (555) 637-9045
* An item may only have 1 number, and each has a quantity on hand and on order
* Each vendor has 1 ID
* A building can have multiple rooms and a room number can correspond to different buildings
* A building can contain 1 or more items
* A building can have multiple vendors
* Items can be kept in multiple rooms of a building
* Item quantities can be ordered from a vendor

AllData

AllData (Item\_Number, Name, Item\_Quantity\_On\_Hand, Item\_Quantity\_On\_Order, Room\_Number, VendorID, Vendor\_Name, Building\_Name, Manager, Phone\_Number )

Transitive dependencies:

VendorID: VendorName

BuildingID: BuildingName, Manager, Phone number

FNF

Item(Item\_Number, Name,Item\_Quantity\_On\_Order, VendorID, Vendor\_Name, Building\_Name, Manager, Phone\_Number)

Room(BuildingID, RoomNumber)

Inventory(Item\_Number, Room\_Number, BuildingID, QuantityOnHand)

Second Normal Form

Already in 2NF

Item(Item\_Number, Name, Item\_Quantity\_On\_Order, VendorID, Vendor\_Name, Building\_Name, Manager, Phone\_Number)

Room(BuildingID, RoomNumber)

Inventory(Item\_Number, Room\_Number, BuildingID, QuantityOnHand)

Third Normal Form and Additions

Item (ItemNumber, Name, VendorID, ItemQOO)

Vendor (VendorID, VendorName, Vendor Street\_Address, Vendor\_City, Vendor\_State, Vendor\_Zip, Vendor\_Email\_Addresss,)

Room(RoomNumber,BuildingID, NumberofItems, StorageCapacity)

Inventory (ItemNumber, BuildingID, ItemQuantityOnHand,RoomNumber)

Manager(ManagerFirstName, ManagerLastName, ManagerCellphone, ManagerEmail, ManagerID)

Building (*BuildingID*, Name, *ManagerID*, PhoneNumber)

Diagram

Description automatically generated

Data Import

Graphical user interface, text, application

Description automatically generated

Questions

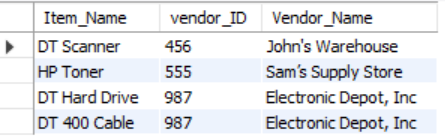
1)

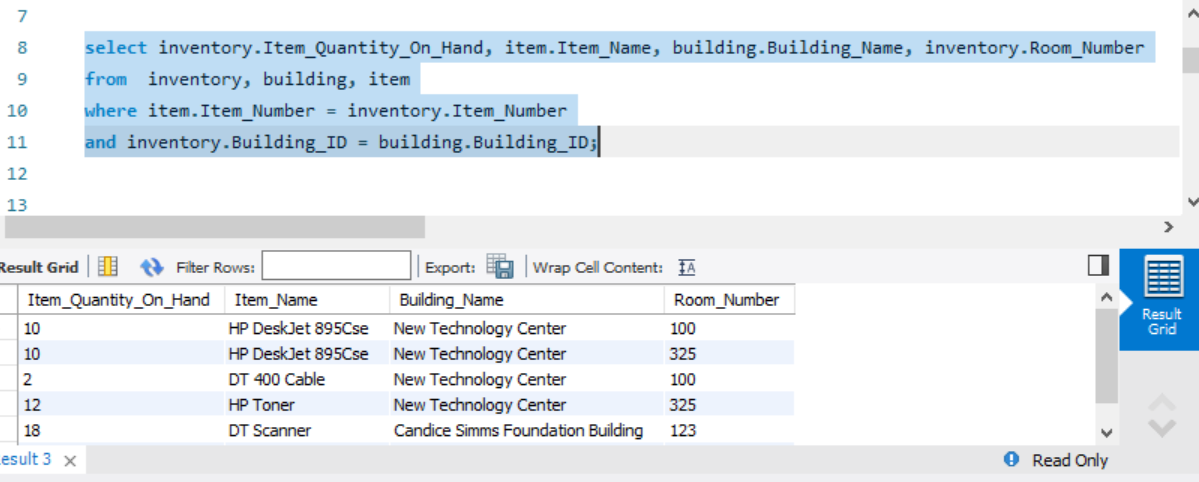
select item.Item\_Name, vendor.vendor\_ID, vendor.Vendor\_Name

from item, vendor

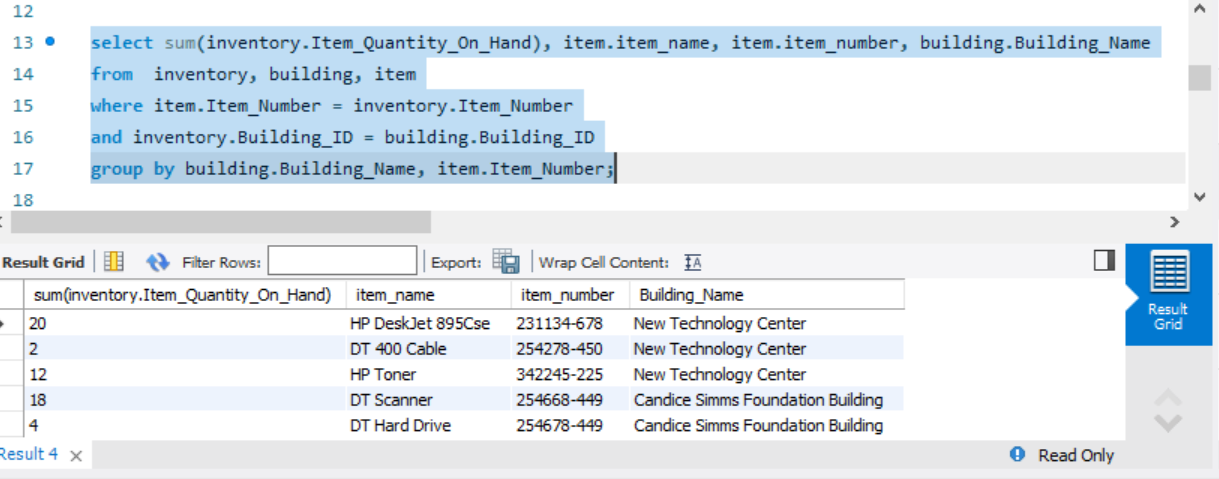
where Item\_Quantity\_On\_Order > 0

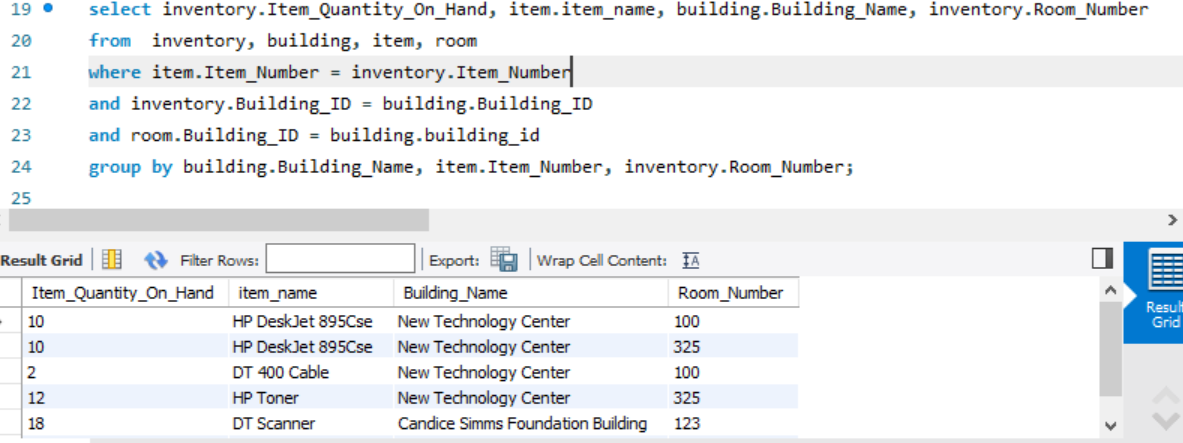
And item.Vendor\_ID = vendor.vendor\_ID;



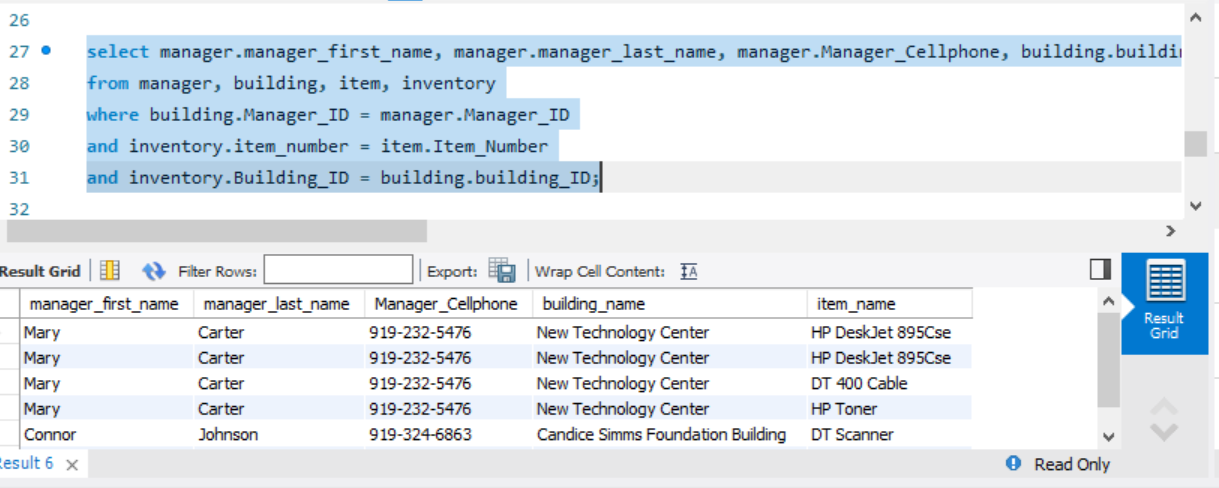
2) 

3)

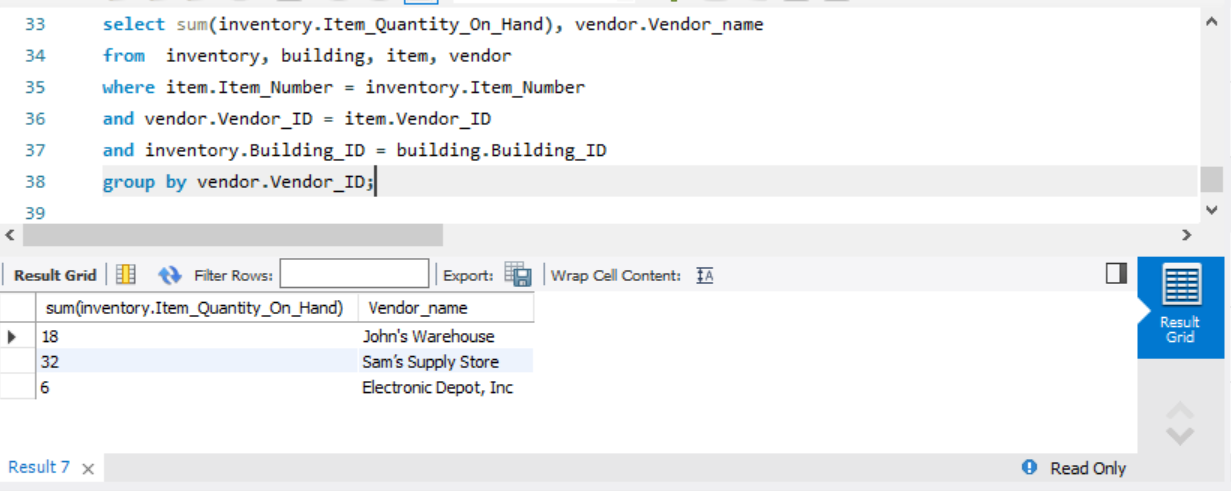
4)



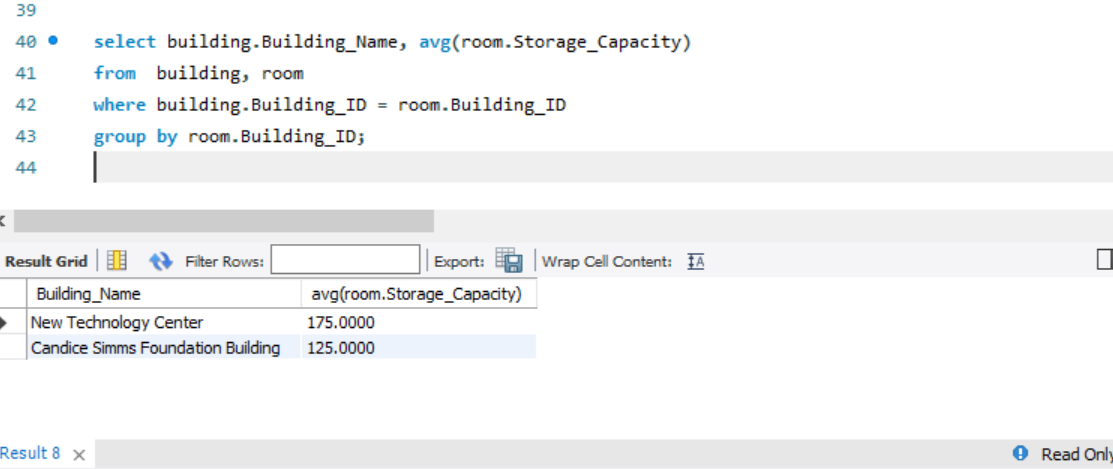
5)



6)



7) What is the average storage capacity for the rooms of both buildings?



Based ond data below

