

## Lab 5 – Physical Database Design

### Deliverable

Word or PDF File containing your work

### Set up

In this lab, you will apply the concepts learned in this week's lectures and readings. You'll need access to a SQL Server instance to perform these tasks. You can use either the iSchool resource or install SQL Server Developer or Express edition on your own computer.

It may also be helpful to review the W3 Schools chapter on creating SQL tables here:

[http://www.w3schools.com/sql/sql\\_create\\_table.asp](http://www.w3schools.com/sql/sql_create_table.asp)

### Steps

Create a blank document to record your answers to the questions called out below. Ensure your name is at the top of the document! Any diagrams should be done using Visio 2010 and paste the diagram into your Word Document.

1. From your textbook, answer the following questions:
  - a. Page 233, 5-4, 5-5, 5-6, 5-8
  - b. Page 234, 5-32, 5-33
2. Using the following diagram, code the CREATE TABLE statement to create this table in SQL Server.

Product		
<b>PK</b>	<b><u>ProductID</u></b>	<b>int identity</b>
	<b>ProductName</b> ProductDescription <b>QtyOnHand</b>	<b>char(30)</b> varchar(255) <b>int</b>

Set the QtyOnHand Default property to 0 (in SQL!). You can do this using the DEFAULT constraint in the CREATE TABLE statement or in an ALTER TABLE statement. Any fields in bold are required (see NOT NULL here [http://www.w3schools.com/sql/sql\\_notnull.asp](http://www.w3schools.com/sql/sql_notnull.asp)), and ProductID is the primary key. See this thread for how to do this:

[http://www.w3schools.com/sql/sql\\_create\\_table.asp](http://www.w3schools.com/sql/sql_create_table.asp). You'll want to review each chapter in that tutorial.

3. Copy and paste your sql code into your Word document and submit this document.  
(Note: we will be using this table later, so be sure to actually run this command!)