

Intermediate SQL Server 2008 Administration

Installing SQL Server for Class	1
Database Basics Review	2
SQL Server Databases	3
Creating User Databases Within the SQL Server Management Studio.....	5
Creating Tables Within the SQL Server Management Studio.....	7
Viewing and Modifying the Database Properties	11
Viewing and Modifying Table Properties.....	13
Viewing Table Properties	13
Using Transact-SQL To Create a New Database	13
Database Snapshots.....	20
Data Compression.....	21
General Data Compression Considerations	21
The sp_estimate_data_compression_savings Stored Procedure	22
Row and Page Compression Considerations	23
Data Compression and Other SQL Server Components.....	23
Examples of Data Compression.....	24
The Data Compression Wizard.....	25
Monitoring Compression	26
Filegroups	28
Exercise 1.....	40
Importing Data Using SQL Server Integration Services	42
Importing Text Data.....	42
Importing Microsoft Access Data.....	47
Listing Providers Supported by SQL Server	52
Exercise 2.....	53
SQL Server Backups.....	54
The Recovery Models.....	54
SQL Server Data Backups	58
Transaction Log Backup.....	60
File and Filegroup Backups	61
Tail-Log Backups.....	62
Estimating Backup Space Requirements	63
Creating a Backup Device	65
Performing Database, Transaction Log, Differential, and File/Filegroup Backups	67
Backup Operation Restrictions	75
Backup Compression	76
Considerations for Backing Up the System Databases.....	77

The Transaction Log File.....	78
Transaction Log Truncation.....	79
Shrinking the Database and Transaction Log Files	82
Automatically Shrinking the Database	82
Manually Shrinking the Database.....	82
Manually Shrinking the Individual Database Files.....	83
Shrinking the Database Using Transact-SQL.....	84
SQL Server Restore Operations.....	91
General Restore Information.....	91
To Restore a Database Using the SQL Server Management Studio.....	92
To Restore a Database Using the RESTORE DATABASE Statement.....	96
To Restore Using the RESTORE LOG Statement	98
Automating Database Administration.....	99
Creating Operators	99
SQL Server Agent.....	100
Modifying an Existing Job.....	105
Manually Starting/Stopping a Job.....	106
Job History	106
The Job Activity Monitor	106
Flowcharting Job Steps.....	107
Exercise 3.....	108
Alerts.....	109
Maintenance Plan Wizard.....	115
Manually Executing the Maintenance Plan	123
Viewing the Maintenance Reports and History	123
Database and Server Maintenance	124
Error Logs	124
Recording Configuration Information	124
Login Account Management.....	125
Database Maintenance	125
Table and Object Maintenance	125
Job Maintenance	125
Windows Server Maintenance	126
Maintenance Checklist.....	126
Exercise 4.....	127
Indexes and Index Performance.....	128
Table Scans, Pages, and Extents.....	128
SQL Server Index Structure.....	129
Clustered and Nonclustered Indexes.....	130

General Index Information.....	132
The Database Engine Tuning Advisor.....	132
Query Optimization	141
Query Optimizer	141
Query Optimization Tools	144
Overriding the Query Optimizer.....	149
Exercise 5.....	151
MultiUser Considerations	152
Locks.....	152
Blocking and Deadlocks	152
Physical Locks	153
Locking Methods	154
Commands That Can Help Control Locking	155
Viewing Locks and Blocking.....	156
Minimizing Locking and Preventing Deadlocks	160
Multiuser Configuration Options.....	161
Detaching and Reattaching Database Files.....	165
Using the SQL Server Management Studio to Detach/Reattach Database Files.....	165
Exercise 6.....	168
Appendix A: Solutions to Exercises	169