

REVIEW LESSON

MTA Course: Database Administration Fundamentals

Lesson name: Database Administration Fundamentals 2.4

Topic: Create stored procedures and functions (One 50-minute class period)

File name: DBAdminFund_RL_2.4

Lesson Objective:

2.4: Create stored procedures and functions. *This objective may include but is not limited to:* selecting, inserting, updating, or deleting data.

Preparation Details

Prerequisite student experiences and knowledge

An understanding of managing database objects on stored procedures, functions, and the SELECT command are required for this lesson. The primary focus of this review will be on applied use of the SELECT command within functions and stored procedures.

This MTA Certification Exam Review lesson is written for students who have learned about database administration. Students who do not have the prerequisite knowledge and experiences cited in the objective will find additional learning opportunities using resources such as those listed in the Microsoft® resources and Web links at the end of this review lesson.

Instructor preparation activities

None

Resources, software, and additional files needed for this lesson:

- Microsoft PowerPoint® viewer and projector
- DBAdminFund_PPT_2.4

Teaching Guide

Essential Vocabulary:

function—a one-word command that returns a single value..

aggregate function—a function that returns a single value, calculated from values in a column.

scalar function—a function that returns a single value, based on the input value. Scalar functions do not require any input value (e.g. CURRENT_DATE).

user-defined function—compact, user-written SQL code that can accept parameters and return either a value or a table.

stored procedure—a precompiled group of SQL statements saved to a database.

Lesson Sequence

Activating prior knowledge/lesson staging (5 minutes)

1. *Say:* “The focus of this review lesson will be on the SELECT command with functions and stored procedures. Recall that tables are made of columns and databases are made of tables. Today’s lesson is about SQL functions and procedures that help us use the data in our databases.”

Lesson activity (35 minutes)

1. Review the lesson concepts with the PowerPoint presentation DBAdminFund_PPT_2.4.

Assessment/lesson reflection (10 minutes)

1. There are three questions on the last slide of the PowerPoint presentation. This will give you an opportunity to have a class discussion. If you choose a formal assessment, you can turn these questions into a written quiz. The use of small whiteboards works very well here as a lesson reflection tool.

Microsoft resources and Web links

Faculty Connection Academic Resource Center

(<http://www.microsoft.com/education/facultyconnection/ARC/ResourceCenter.aspx?c1=en-us&c2=0>)

Additional teacher notes:

- If time permits, this topic could be expanded into a second day.