Chapter 14

Exercises

Be sure to review all of the required elements for turning in your assignments so you do not miss any points! Since there are no rows updated for these scripts, that information isn’t needed.

1. Write a script that declares a variable and sets it to the count of all products in the Products table. If the count is greater than or equal to 7, the script should display a message that says, “The number of products is greater than or equal to 7”. Otherwise, it should say, “The number of products is less than 7”.

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| --- |
| DECLARE @ProductsCount INT;  SET @ProductsCount = (SELECT COUNT(ProductID) FROM Products);  IF @ProductsCount >= 7  PRINT 'The number of products is greater than or equal to 7.';  ELSE  PRINT 'The number of products is less than 7.'; |
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1. Write a script that uses two variables to store (1) the count of all of the products in the Products table and (2) the average list price for those products. If the product count is greater than or equal to 7, the script should print a message that displays the values of both variables. Otherwise, the script should print a message that says, “The number of products is less than 7”.

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| --- |
| DECLARE @ProductsCount INT;  SET @ProductsCount = (SELECT COUNT(ProductID) FROM Products);  DECLARE @AvgPrice MONEY;  SET @AvgPrice = (SELECT AVG(ListPrice) FROM Products);  IF @ProductsCount >= 7  PRINT 'Count:' + CONVERT(varchar, @ProductsCount) + ' Avg Price: $' + CONVERT(varchar, @AvgPrice);  ELSE  PRINT 'The number of products is less than 7.'; |
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1. Write a script that calculates the common factors between 10 and 20. To find a common factor, you can use the modulo operator (%) to check whether a number can be evenly divided into both numbers. Then, this script should print lines that display the common factors like this:

Common factors of 10 and 20

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| DECLARE @factors INT = 1;  WHILE @factors < 10  BEGIN  IF 10 % @factors = 0m AND 20 % @factors = 0  PRINT CONVERT(varchar, @factors);  SET @factors += 1;  END; |
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1. Write a script that attempts to insert a new category named “Guitars” into the Categories table. If the insert is successful, the script should display this message:

SUCCESS: Record was inserted.

If the update is unsuccessful, the script should display a message something like this:

FAILURE: Record was not inserted.

Error 2627: Violation of UNIQUE KEY constraint 'UQ\_\_Categori\_\_8517B2E0A87CE853'. Cannot insert duplicate key in object 'dbo.Categories'. The duplicate key value is (Guitars).

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| --- |
| BEGIN TRY  INSERT INTO Categories(CategoryName) VALUES('Guitars')  PRINT 'Record Was INSERTED';  END TRY  BEGIN CATCH  PRINT 'FAILURE: Record was not inserted.'  PRINT 'ERROR '+CONVERT(varchar,ERROR\_NUMBER())+': '+CONVERT(varchar,ERROR\_MESSAGE())+'.';  END CATCH |
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