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70-466

Implementing Data Models and Reports with Microsoft SQL Server 2014

Testlet 1

Tailspin Toys is a multinational company that manufactures toys. Tailspin Toys has offices in five regions worldwide. The company sells toys at various retail stores. The company also sells toys directly to consumers through a web site.

The company has the following departments:

- Sales
- Distribution
- Manufacturing

Each department has an office in each region.

The fiscal calendar of Tailspin Toys runs from June to May.

The network contains a server farm that has Microsoft SharePoint Server 2013 installed.

Existing Environment

Current Database Environment

Each department uses SharePoint team sites for internal collaboration.

All manufacturing information is stored in a relational database named Manufacturing. All sales information is stored in a relational database named Sales.

Tailspin Toys deploys SQL Server Analysis Services (SSAS) and configures SSAS to use tabular models. SSAS will be used for all sales reports.

Tailspin Toys deploys a SQL Server Reporting Services (SSRS) instance in SharePoint mode.

Sales Database

A database named Sales contains two tables named FactSales and DimProduct. FactSales contains the following columns:

- SalesID
- Total Due
- OrderDate

DimProduct contains the following columns:

- ProductID
- ProductName
- ProductCategory
- ProductSubcategory

The Sales database contains information about the products. Most of the products have a category and a subcategory. Certain products only have a category.

A sample from DimProduct is shown in the following table.

ProductID	ProductName	ProductCategory	ProductSubcategory
1	Balsa Wood Flyer	Plane	Classic
2	Radio Controlled Flyer	Plane	Radio Controlled
3	Plastic Model	Model	Model

Requirements

Security Requirements

Tailspin Toys identifies the following security requirement:

- Sales department users must be allowed to view the sales transactions from their region only.
- Sales department users must be able to view the contents of the manufacturing reports.
- Manufacturing department users must be able to create new manufacturing reports.
- Third-party and custom solutions must NOT be deployed to the reporting server.
- Sales department users must NOT be able to create new manufacturing reports.

Planned Reporting Implementation

The manufacturing department plans to use the SSRS instance for its reports. The manufacturing department also plans to make its reports accessible from SharePoint. All manufacturing reports will use an existing database named Manufacturing.

Reporting Requirements

Tailspin Toys identifies the following reporting requirements:

- All reports must contain the company logo and a header that contains the date and the time that the report was executed.
- All reports must be created by using the SQL Server Data Tools.

Manufacturing report

You plan to create a report named ManufacturingIssues.rdl. The report has the following requirements:

- Manufacturing department managers must be able to view product issues by product type, manufacturing plant location, and error type.
- The manufacturing department managers must be able to change views by choosing options from drop-down lists.

Sales reports

You plan to create a sales report named RegionalSales.rdl. The report has the following requirements:

- Users must be able to view the report by using a web browser. By default, subcategories and product details must be hidden when using the browser.
- Users must be able to subscribe to receive the report by email. The report must be sent by email as a PDF attachment.

You plan to create a quarterly sales report named QuarterSales.rdl. The report must display sales data by fiscal quarter.

Technical Requirements

Tailspin Toys identifies the following technical requirements:

Products in the DimProduct table that do NOT have a subcategory must use the category value as the subcategory value.

- SSRS must NOT connect to databases more frequently than once every 30 minutes.
- Sales department users must be able to use Microsoft Excel to browse tabular data.

QUESTION 1

You need to recommend a solution for the sales department that meets the security requirements.

What should you recommend?

- A. Create one role for all of the sales department users. Add a DAX filter that reads the current user name and retrieves the user's region.
- B. Create one role for each region. Configure each role to have read access to a specific region. Add the sales department users to their corresponding role.
- C. Create a table for each region. Create a role for each region. Grant each role read access to its corresponding table.
- D. Create one role for all of the sales department users. Configure the role to have read access to the sales transactions. Ensure that all of the reports that access the sales transaction data restrict read access to the data from the corresponding sales department region only.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

Scenario: Tailspin Toys identifies the following security requirement:

- Sales department users must be allowed to view the sales transactions from their region only.
- Sales department users must be able to view the contents of the manufacturing reports.
- Sales department users must NOT be able to create new manufacturing reports.

QUESTION 2

You need to configure the dataset for the ManufacturingIssues report. The solution must meet the technical requirements and the reporting requirements.

What should you do?

- A. Configure the dataset to use a stored procedure. Add the necessary parameters to the stored procedure.
- B. Add a query to retrieve the necessary data from the database. Configure the dataset to use query parameters.
- C. Add a query to retrieve the necessary data from the database. Configure the dataset to use filter parameters.
- D. Configure the dataset to use a table. Ensure that the database has a table that contains the necessary information.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 3

You need to ensure that all reports meet the reporting requirements.

What is the best way to achieve the goal? More than one answer choice may achieve the goal. Select the BEST answer.

- A. Create a report part. Publish the report part to a server that has SSRS installed. Add the report part to each new report that is created.
- B. Create a report part. Publish the report part to a SharePoint site. Add the report part to each new report that is created.
- C. Create a report. Copy the report to source code control. Create each new report by using the report template in source code control.
- D. Create a report. Copy the report to the PrivateAssemblies\ProjectItems\ReportProject folder in the Visual Studio directory. Create each new report by using the locally stored report

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 4

You need to configure a hierarchy for DimProduct that meets the technical requirements.

What should you do?



https://www.gratisexam.com/

- A. Set ProductName as the parent of ProductSubCategory and set ProductSubcategory as the parent of ProductCategory. For ProductSubcategory, click Hide if Name Equals Parent.
- B. Set ProductCategory as the parent of ProductSubCategory and set ProductSubcategory as the parent of ProductName. For ProductSubcategory, click Hide if Name Equals Parent.
- C. Set ProductName as the parent of ProductSubcategory and set ProductSubCategory as the parent of ProductCategory. For ProductCategory, click Hide if Name Equals Parent.
- D. Set ProductCategory as the parent of ProductSubcategory and set ProductSubCategory as the parent of ProductName. For ProductCategory, click Hide if Name Equals Parent.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 5

You need to recommend a solution to meet the requirements for the ManufacturingIssues.rdl report.

What is the best solution that you should include in the recommendation? More than one answer choice may achieve the goal. Choose the BEST answer.

- A. Add a dataset to the report that uses an ad hoc SQL statement. Configure the dataset to include the parameters required for the different views. Add a dataset for each parameter created. Configure each parameter to use the values in the dataset.
- B. Add a dataset to the report that uses an ad hoc SQL statement. Configure the dataset to include the parameters required for the different views. Update each parameter to use a set of values from Report Designer.
- C. Add a dataset to the report that uses an ad hoc SQL statement. Configure the dataset to include the parameters required for the different views. Use the default display for the parameters.
- D. Add a dataset to the report that uses a stored procedure. Configure the dataset to include the parameters required for the different views. Update each parameter to use a set of values from Report Designer.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 6

You need to modify the environment before you create the QuarterSales report.

What should you do?

- A. Add a date table to the model that contains columns for the fiscal and calendar quarters.
- B. Add a date table to the model that contains measures for the fiscal and calendar quarters.
- C. Configure a time dimension by using the Time Intelligence Wizard.
- D. Configure SSAS to use a server time dimension.

Correct Answer: C

Section: [none] Explanation

Explanation/Reference:

QUESTION 7

After you deploy the RegionalSales report, users report that they cannot see product data when they receive the reports by email.

You need to ensure that the sales department managers can see all of the data.

In the report, you update the Hidden property of each group.

What should you do next?

- A. When the report is initially run, select Show or hide based on an expression. Set the expression to = (Globals!RenderFormat.IsInteractive)
- B. When the report is initially run, select Show.
- C. When the report is initially run, select Show or hide based on an expression. Set the expression to =NOT (Globals!RenderFormat.IsInteractive).
- D. When the report is initially run, select Hide.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 8

After you deploy the RegionalSales report, you attempt to configure the subscriptions.

You discover that the subscription creation screen does not display the option to deliver the report by email.

You need to ensure that subscriptions can be delivered by using email.

What should you do?

- A. Modify the Rsmgrpolicy.config file.
- B. From Central Administration, modify the SMTP settings of the SharePoint Server server farm.
- C. Modify the Rssrvrpolicy.config file.
- D. From Central Administration, modify the properties of the Reporting Service Application.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

Testlet 1

Background

You are the business intelligence (BI) solutions architect for Contoso Ltd, a multinational sales company with offices in London, Madrid, Paris, Brisbane, Tokyo, and New York. Contoso sells office consumable products such as pens, printer ink, and paper.

You produce solutions by using SQL Server 2012 Business Intelligence Edition and Microsoft SharePoint Server 2010 Enterprise Edition with SP1.

Technical Background

Contoso's products are categorized by using four levels while some use only two or three levels. Products are categorized as shown in the following table.

Product Type	Product Category	Product Sub Category	Product Sub Section
Papers	Copy Paper		
	Note	Sticky Notes	
		"Sign Here" Notes	
Tapes and Glue	Adhesive Glue		
	Таре	Masking Tape	
		Sticky Tape	
Writing	Pens	Ball Pens	
		Pencils	
		WhiteBoard Markers	Permanent Markers
			Removable Markers
	Corrections	Correction Tape	
		Correction Fluid	
	Erasers		

Contoso sells products through mobile sales staff, direct marketing, and its website. Sales personnel are located in various regions around the world, and each region has a sales manager who is paid a quarterly bonus based on the total sales in the region during the quarter. Regions are categorized as shown in the following table.

Region	Country	State
Oceania	Australia	Queensland
		New South Wales
	New Zeal	Canterbury
	100,000	Marlborough
Europe	Great Britain	Cornwall
		Aberdeen
		Cardiff
	Germany	Baden-Wurttemberg
		Saxony

SQL Server Analysis Services (SSAS) is used to host a multidimensional database. The database contains a single cube named Sales and three database dimensions named Products, Regions, and Date. A single measure named Sales Total has been defined in the cube. The data source for the database is a SQL Server data warehouse.

The Products dimension contains a single user-defined hierarchy named Products. To prevent the display of empty members when users browse the Products dimension, the Extract, Transform, and Load (ETL) process populates all missing values as shown in the following diagram.

Product Type	Product Category	Product Sub Category	Product Sub Section
Papers	Copy Paper	Copy Paper	Copy Paper
Papers	Note Papers	Sticky Notes	Sticky Notes

The structure of the Products hierarchy is shown in the following diagram.

Products	
Product Type	
Product Category	
Product Sub Category	
Product Sub Sectio	n

The Regions dimension contains a single user-defined hierarchy named Sales Regions. The dimension is based on a single dimension table in the data warehouse and the attribute relationships have not been modified since the dimension was created by using the Dimension wizard. The structure of the Sales Regions hierarchy is shown in the following diagram.

Sales Regions	
Region	
Country	
State	

The Date dimension contains a single user-defined hierarchy named Calendar. The structure of the Calendar hierarchy is shown in the following diagram.

Calendar	
Year	
Quarter	
Month	
Date	

A role named UserRegions has been created in the SSAS database that will be used to filter members in the Regions dimension based on the authenticated user.

Administrative staff from around the world will produce sales reports with Microsoft Excel 2010 based on the Sales cube.

Developers will produce reports with SQL Server Reporting Services (SSRS) based on the Sales cube and the reports will be delivered to users through report subscriptions and a web browser-All users log on to an Active Directory Domain Services (AD DS) domain named contoso.com.

All client computers and servers are joined to the contoso.com domain.

Business Requirements

The BI system must meet the following reporting requirements:

- Display all sales figures in euro currency, regardless of the client's reporting location
- Include a new measure named AD Sales that calculates average daily sales for a selected month
- Support near real-time reporting while maintaining good performance for multidimensional queries
- Support reports that show currency exchange rates
- Deliver executive reports that are parameterized and rendered from report snapshots

In addition, cube objects must use terms familiar to users from around the world. For example, in the SalesRegions hierarchy, users from Great Britain must see the State level presented as County when browsing the Sales cube.

The Sales cube must support a new measure group named Sales Planning. The measure group must consist of a single measure named Sales Plan that enables the management team to use Excel 2010 to enter sales plans for future monitoring.

The BI system must meet the following technical requirements:

Architecture requirements

- The system must use separate servers for each of the following components:
 - SQL Server Database Engine
 - SQL Server Integration Services
 - SQL Server Analysis Services in multidimensional mode
 - SharePoint Server with the Reporting Services Add-in
- All servers must be installed using U.S. regional settings.
- The system must source currency exchange rate data from a database hosted in Microsoft Azure SQL Database.

Security requirements

- When possible, the system must use Windows authentication for all database connections.
- The system must prevent users from querying data from outside of their region.
- The system must allow certain users to query data from multiple regions.

Development requirements

- When browsing the Products hierarchy, repeating values for different levels of a given drill-path must be avoided. For example, Papers -> Copy Paper -> Copy Paper should appear simply as Papers -> Copy Paper.
- The system must support report snapshots. The default maximum number of retained snapshots must not exceed five.

QUESTION 1

You need to develop an SSRS report that retrieves currency exchange rate data.

How should you configure the data source for the report?

- A. Use the Microsoft Azure SQL Database data source type and then set a username and password for the credentials.
- B. Use the SQL Server data source type and then set Windows authentication for the credentials.
- C. Use the Microsoft Azure SQL Database data source type and then set Windows authentication for the credentials.
- D. Use the SQL Server data source type and then set a username and password for the credentials.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 2

You need to create the AD Sales measure.

Which aggregation function should you use?

- A. Sum
- B. Average
- C. ByAccount
- D. AverageOfChildren

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 3

You need to meet the browsing requirements for the Products hierarchy.

Which property should you modify?

- A. DefaultMember
- B. AttributeHierarchyDisplayFolder
- C. HideMemberIf
- D. RootMemberIf

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 4

You need to configure the partition storage settings to support the reporting requirements.

Which partition storage setting should you use?

- A. High-latency MOLAP
- B. In-Memory
- C. Low-latency MOLAP
- D. DirectQuery
- E. LazyAggregations
- F. Regular

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 5

You need to configure per-user security authentication for reporting against the Sales cube.

What should you do? (Each correct answer presents part of the complete solution. Choose all that apply.)

A. Create Service Principal Names (SPNs).



- B. Enable forms-based authentication.
- C. Configure account delegation.
- D. Enable mixed-mode authentication.

Correct Answer: AD Section: [none] Explanation

Explanation/Reference:

QUESTION 6

You need to configure SSRS to meet the maximum number of snapshots requirement.

What should you do? (Each answer presents a complete solution. Choose all that apply.)

- A. In SharePoint Central Administration, set the System Snapshot Limit option to 5.
- B. In Reporting Services Configuration Manager, set the Limit number of snapshots option to 5.
- C. For each report, set the System Snapshot Limit option to 5.
- D. Use PowerShell to set the System Snapshot Limit option to 5.

Correct Answer: AC Section: [none] Explanation

Explanation/Reference:

QUESTION 7

You need to modify the Sales cube to support the planning requirements.

Which SSAS feature should you use?

- A. A KPI
- B. A translation
- C. A perspective
- D. A writeback partition

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 8

You need to modify the Sales Regions hierarchy to meet the reporting requirements.

Which SSAS feature should you use?

A. Calculation

- B. Translation
- C. Perspective
- D. Action

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 9

You need to develop the executive reports.

What should you do? (Each correct answer presents part of the solution. Choose ail that apply.)

- A. Provide default values for all parameters.
- B. Set the data source to use Windows authentication.
- C. Remove default values from all parameters.
- D. Implement dataset filters to filter data.
- E. Set the data source to use stored Windows credentials.
- F. Implement dataset query parameters to filter data.

Correct Answer: ADE Section: [none] Explanation

Explanation/Reference:

QUESTION 10

You need to configure the UserRegions role.

Which Multidimensional Expressions (MDX) function should you use?

- A. USERNAME()
- B. USERID()
- C. CUSTOMDATA()

D. UNIQUENAME()

E. LOOKUPVALUE()

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

Explanation:

From Scenario: A role named UserRegions has been created in the SSAS database that will be used to filter members in the Regions dimension based on the authenticated user.

The MDX function UserName feturns the domain name and user name of the current connection.

References: https://download.microsoft.com/download/0/F/B/0FBFAA46-2BFD-478F-8E56-7BF3C672DF9D/Multidimensional%20Expressions%20-%20MDX%20-%20Reference.pdf, page 350

QUESTION 11

You need to configure the format of the Sales Total measure.

Which value should you use for the FormatString property?

A. \$#,##0.00;(\$#,##0.00)

B. #,##0.00;-#,##0.00

C. Currency

D. A custom-entered value

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

Testlet 1

General Background

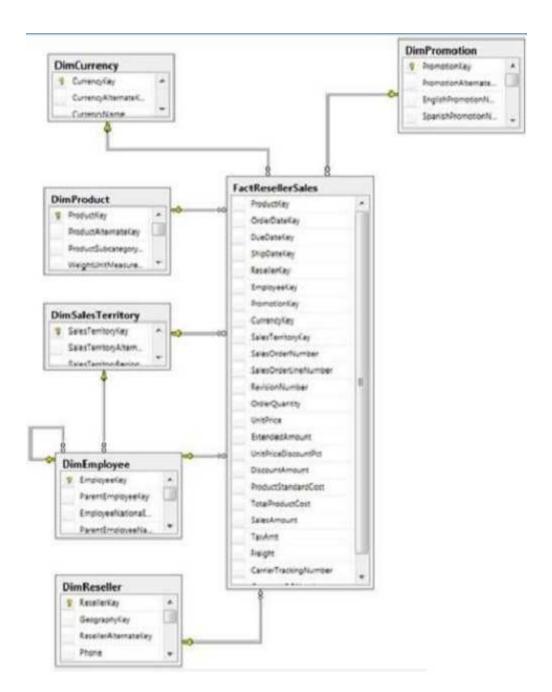
You are the data architect for a company that uses SQL Server 2012 Enterprise Edition. You design data modeling and reporting solutions that are based on a sales data warehouse.

Background

The solutions will be deployed on the following servers:

- ServerA runs SQL Server Database Engine, ServerA is the data warehouse server.
- ServerB runs SQL Server Database Engine, SQL Server Analysis Services (SSAS) in multidimensional mode, and SQL Server Integration Services (SSIS).
- ServerC runs SSAS in tabular mode, SQL Server Reporting Services (SSRS) running in SharePoint mode, and Microsoft SharePoint 2010 Enterprise Edition with SP1.

The data warehouse schema currently contains the tables shown in the exhibit. (Click the Exhibit button.)



Business Requirements

The reporting solution must address the requirements of the sales team, as follows:

- Team members must be able to view standard reports from SharePoint.
- Team members must be able to perform ad-hoc analysis by using Microsoft Power View and Excel.
- Team members can have standard reports delivered to them on a schedule of their choosing.

The standard reports

- Will use a sales territory hierarchy for organizing data by region.
- Will be accessible from SharePoint.

The Excel ad-hoc reports

- Will use the same data store as the standard reports.
- Will provide direct access to the data store for the sales team and a simplified view for the executive team.

Technical Requirements

The standard reports must be based on an SSAS cube. The schema of the data warehouse on ServerA must be able to support the ability to slice the fact data by the following dates:

- Order date (OrderDateKey)
- Due date (DueDateKey)
- Ship date (ShipDateKey)

Additions and modifications to the data warehouse schema must adhere to star schema design principles to minimize maintenance and complexity

The multidimensional and tabular models will be based on the data warehouse. The tabular and multidimensional models will be created by using SQL Server Data Tools (SSDT). The tabular project is named AdhocReports and the multidimensional project is named Standard Reports.

The cube design in the Standard Reports project must define two measures for the unique count of sales territories (SalesTerritoryKey) and products (ProductKey).

A deployment script that can be executed from a command-line utility must be created to deploy the StandardReports project to ServerB.

The tabular model in the AdhocReports project must meet the following requirements:

- A hierarchy must be created that consists of the SalesTerritoryCountry and SalesTerritoryRegion columns from the DimSalesTerritory table and the EmployeeName column from the DimEmployee table.
- A key performance indicator (KPI) must be created that compares the total quantity sold (OrderQuantity) to a threshold value of 1,000.
- A measure must be created to calculate day-over-day (DOD) sales by region based on order date.

SSRS on ServerC must be configured to meet the following requirements:

- It must use a single data source for the standard reports.
- It must allow users to create their own standard report subscriptions.
- The sales team members must be limited to only viewing and subscribing to reports in the Sales Reports library.

A week after the reporting solution was deployed to production, Marc, a salesperson, indicated that he has never received reports for which he created an SSRS

subscription. In addition, Marc reports that he receives timeout errors when running some reports on demand.

QUESTION 1

You need to create the KPI in the AdhocReports project.

What should you do?

- A. Create a measure by using the SUM([OrderQuantity]) expression. Then use the CREATE KPI CURRENTCUBE statement to define the KPI and target value.
- B. Create a measure by using the SUM([OrderQuantity]) expression and create a KPI based on the measure. Then set the target value.
- C. Create a measure by using the COUNT([OrderQuantity]) expression and create a KPI based on the measure. Then set the target value.
- D. Create a KPI based on the OrderQuantity column and then set the target value.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 2

You need to deploy the StandardReports project at the end of the current business day.

What should you do? (Each correct answer presents a complete solution. Choose all that apply.)

- A. Use the Analysis Services Deployment utility to create an XMLA deployment script and run it at the end of the day.
- B. Use the Analysis Services Deployment wizard to create an MDX deployment script and run it at the end of the day.
- C. Use the Analysis Services Deployment wizard to create an XMLA deployment script and run it at the end of the day.
- D. Deploy the project from SQL Server Data Tools (SSDT) at the end of the day.

Correct Answer: CD Section: [none] Explanation

Explanation/Reference:

QUESTION 3

You need to create the sales territory and product measures.

Which aggregate function should you use for both measures?

- A. Count
- B. COUNT(DIST1NCT column_name)
- C. DistinctCount
- D. Distinct

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 4

You need to ascertain why Marc did not receive his reports.

What should you do?

- A. Search the ReportServerService_<timestamp>.log file for errors.
- B. Search the registry for errors.
- C. Use SQL Server Management Studio to search the SQL Server logs for errors.
- D. Use the Windows Event Viewer to search the Application log for errors.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 5

You need to create the hierarchy in the AdhocReports project.

What should you do?

- A. Multi-select all of the columns, right-click the columns, and then click the Create Hierarchy command. Check in the changes before the next release cycle.
- B. Use the RELATEDTABLE() function to consolidate the tables, multi-select the columns in the hierarchy, right-click the columns, and then click the Create Hierarchy command.
- C. Use the RELATED() function to consolidate the columns in the DimSalesTerritory table, multi-select the columns, right-click the columns, and then click the

Create Hierarchy command.

D. Use the RELATED() function to consolidate the columns in the DimEmployee table, multi-select the columns, right-click the columns, and then click the Create Hierarchy command.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 6

You need to create the KPI in the AdhocReports project in time for the next production release cycle.

What should you do?

- A. Create a measure by using the COUNT([OrderQuantity]) expression and create a KPI based on the measure. Then set the target value. Check in the changes before the next release cycle.
- B. Create a KPI based on the OrderQuantity column and then set the target value. Check in the changes before the next release cycle.
- C. Create a measure by using the SUM([OrderQuantity]) expression and create a KPI based on the measure. Then set the target value. Check in the changes before the next release cycle.
- D. Create a measure by using the SUM((OrderQuantity]) expression. Then use the CREATE KPI CURRENTCUBE statement to define the KPI and target value. Check in the changes before the next release cycle.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 7

You need to identify the reports that produce the errors that Marc is receiving.

What should you do?

- A. Write a guery by using the Subscriptions table in the report server database.
- B. Write a query by using the Execution Log 3 view in the report server database.
- C. Use the Windows Event Viewer to search the Application log for errors.

D. Search the ReportServerService <timestamp>.log file for errors.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 8

You need create the data source view for the StandardReports project.

What should you do?

- A. Create a data source, connect it to the data warehouse, and then use the Data Source View wizard.
- B. Generate a relational schema from the dimensions and cubes by using the Schema Generation wizard.
- C. Create a new data source view and then use the Import from Table wizard.
- D. Execute the Import from Table wizard and then use the Data Source View wizard.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 9

You need to create a measure for DOD sales.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

- A. Use the Data Analysis Expressions (DAX) PARALLELPERIOD () function.
- B. Create a date dimension by using the Dimension wizard with a date template.
- C. Specify a date table by using a Mark the Date table.
- $\hbox{D. Use the Multidimensional Expressions (MDX) PARALLELPERIOD() function.}$

Correct Answer: AC Section: [none] Explanation

Explanation/Reference:

QUESTION 10

You need to develop the multidimensional project to meet the requirements of the Excel users.

What should you do?



- A. Create a separate cube for the executive team so that it contains only the data they want to see.
- B. Create a perspective for the executive team.
- C. Create security roles to restrict access to the executive team.
- D. Create a view for the executive team.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 11

You need to configure the permissions for the sales team members in the Sales Reports library.

Which permissions should you use? (Each answer presents part of the solution. Choose all that apply.)

- A. Delete Items
- B. Add Items
- C. View Items
- D. Create Alerts
- E. Manage Alerts
- F. Edit Items

Correct Answer: CF Section: [none] Explanation

Explanation/Reference:

QUESTION 12

You need to configure the SSRS data source.

What should you do?

- A. Use Windows credentials.
- B. Prompt the user for credentials.
- C. In the data source configuration window, select the Credentials are not required option.
- D. Store the credentials.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 13

You need to deploy the StandardReports project.

What should you do? (Each correct answer presents a complete solution. Choose all that apply.)

- A. Use the Analysis Services Deployment utility to create an XMLA deployment script.
- B. Deploy the project from SQL Server Data Tools (SSDT).
- C. Use the Analysis Services Deployment wizard to create an XMLA deployment script.
- D. Use the Analysis Services Deployment wizard to create an MDX deployment script.

Correct Answer: BC Section: [none] Explanation Explanation/Reference:

Question Set 1

QUESTION 1

You are creating a table named Orders. You need to ensure that every time a new row is added to the Orders table, a user-defined function is called to validate the row before the row is added to the table.

What should you use? More than one answer choice may achieve the goal. Select the BEST answer.

- A. A FOREIGN KEY constraint
- B. A data manipulation language (DML) trigger
- C. A DEFAULT constraint
- D. A CHECK constraint
- E. A Data Definition Language (DDL) trigger

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

Explanation:

DML triggers is a special type of stored procedure that automatically takes effect when a data manipulation language (DML) event takes place that affects the table or view defined in the trigger. DML events include INSERT, UPDATE, or DELETE statements. DML triggers can be used to enforce business rules and data integrity, query other tables, and include complex Transact-SQL statements.

Incorrect Answers:

D: CHECK constraints enforce domain integrity by limiting the values that are accepted by one or more columns. You can create a CHECK constraint with any logical (Boolean) expression that returns TRUE or FALSE based on the logical operators.

References: https://docs.microsoft.com/en-us/sql/relational-databases/triggers/dml-triggers

QUESTION 2

You are administrating a SQL Server Analysis Services (SSAS) tabular database.

You need to create a new role that allows its members to guery data and to refresh data in the model.

Which permission should you use? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Browse and Manage
- B. Administrator
- C. Read and Process

D. Explore and Manage

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

Explanation:

* Giving a database role permission to process an Analysis Services database means that the role has permission to perform all processing options on the database. This includes the processing of all cubes, dimensions, mining structures, and mining models in the database. However, the role does not have permission to read database metadata or access any data in the database itself.

QUESTION 3

You are developing a SQL Server Analysis Services (SSAS) tabular project.

A column named City must be added to the table named Customer. The column will be used in the definition of a hierarchy. The City column exists in the Geography table that is related to the Customer table.

You need to add the City column to the Customer table.

How should you write the calculation?

- A. City:= LOOKUP(Geography[City],Geography[GeographyKey])
- $B. \ \ City:=LOOKUPVALUE (Geography[City], Geography[GeographyKey], [GeographyKey])$
- C. =RELATED(Geography[City])
- D. =RELATED(Geography.City)
- E. =VALUES(Geography[City])
- F. City:=VALUES(Geography[City])

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

Explanation:

* RELATED Function

Returns a related value from another table.

QUESTION 4

You are developing a SQL Server Analysis Services (SSAS) tabular project that will be used by the finance, sales, and marketing teams.

The sales team reports that the model is too complex and difficult to use. The sales team does not need any information other than sales-related resources in the tabular model. The finance and marketing teams need to see all the resources in the tabular model.

You need to implement a solution that meets the needs of the sales team while minimizing development and administrative effort.



What should you do?

- A. Create a separate partition for each team.
- B. Create a separate data source for each team.
- C. Create a perspective for the sales team.
- D. Enable client side security to filter non-sales data.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 5

You are developing a SQL Server Analysis Services (SSAS) tabular project.

You need to grant the minimum permissions necessary to enable users to query data in a data model.

Which role permission should you use?

- A. Explorer
- B. Process
- C. Browser
- D. Administrator
- E. Select
- F. Read

Correct Answer: F Section: [none] Explanation

Explanation/Reference:

QUESTION 6

You are developing a SQL Server Analysis Services (SSAS) tabular project.

In the data warehouse, a table named Sales Persons and Territories defines a relationship between a salesperson's name, logon ID, and assigned sales territory.

You need to ensure that each salesperson has access to data from only the sales territory assigned to that salesperson. You need to use the least amount of development effort to achieve this goal.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Create a new role named Sales Persons with Read permission. Add each salesperson's logon as a member to the role.
- B. Add the Sales Persons and Territories table to the model, define the relationships, and then implement dynamic security by using row filters. Grant each salesperson access to the model.
- C. Create a new Active Directory Domain Services (AD DS) security group and add each salesperson as a member. Then create a new role named Sales Persons with Read permission. Add the group as a member to the new role.
- D. Create a separate tabular model for each sales territory and assign each tabular model a corresponding sales territory name. Grant each salesperson access to the corresponding tabular model of the assigned sales territory.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 7

You maintain SQL Server Analysis Services (SSAS) instances.

You need to configure an installation of PowerPivot for Microsoft SharePoint in a SharePoint farm.

Which tool should you use? (Each correct answer presents a complete solution. Choose all that apply.)

- A. SQL Server Configuration Manager
- B. PowerPivot Configuration Tool
- C. SharePoint Products Configuration Wizard
- D. SharePoint Central Administration
- E. PowerShell

Correct Answer: BDE Section: [none] Explanation

Explanation/Reference:

Explanation:

Power Pivot for SharePoint must be configured before it can be used. After you install Power Pivot for SharePoint using SQL Server Setup, you can configure it using any of the following approaches:

- Power Pivot Configuration Tool or Power Pivot for SharePoint 2013 Configuration tool
- SharePoint Central Administration
- PowerShell cmdlets

References: https://docs.microsoft.com/en-us/sql/analysis-services/power-pivot-sharepoint/power-pivot-server-administration-and-configuration-in-central-administration

QUESTION 8

You are developing a tabular Business Intelligence Semantic Model (BISM) database based on a SQL Server database.

In the data source, the FactInternetSales table is partitioned by month. Data from the current month has been updated and new data has been inserted in the FactInternetSales table, in the DimProduct table, and in the DimCustomer table.

In the model, the FactInternetSales table is also partitioned by month.

You need to ensure that the model has the most recent data while minimizing the processing time.

What should you do?

- A. Process the latest FactInternetSales model table partition, the DimProduct table, and the DimCustomer table with the Process Clear processing option. Then process the database with the Process Data processing option.
- B. Process the latest FactInternetSales model table partition, the DimProduct table, and the DimCustomer table with the Process Clear processing option. Then process the database with the Process Full processing option.
- C. Process the latest FactInternetSales model table partition, the DimProduct table, and the DimCustomer table with the Process Defrag processing option. Then process the database with the Process Recalc processing option.
- D. Process the latest FactInternetSales model table partition, the DimProduct table, and the DimCustomer table with the Process Data processing option. Then

process the database with the Process Defrag processing option.

E. Process the latest FactInternetSales model table partition, the DimProduct table, and the DimCustomer table with the Process Data processing option. Then process the database with the Process Recalc processing option.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 9

You are modifying a SQL Server Analysis Services (SSAS) multidimensional database.

You have identified a dimension that is no longer used by any cubes.

You need to delete the dimension.

What should you do?

- A. Write a Multidimensional Expressions (MDX) command to drop the dimension from the database.
- B. Write a Data Mining Extensions (DMX) command to drop the dimension from the database.
- C. Script the deletion of the dimension as an XMLA command for execution against the production model.
- D. Write a T-SQL command to drop the dimension from the database.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 10

You manage an environment that has SharePoint Server 2010 and a SQL Server Reporting Services (SSRS) instance in SharePoint integrated mode. Several report subscriptions are configured to deliver reports through email by using a shared schedule.

The email server will be going offline.

You need to temporarily suspend the shared schedule until the email server is brought back online.

What should you do?

- A. In Report Manager, pause the shared schedule.
- B. In SharePoint Central Administration, pause the shared schedule.
- C. In Report Manager, delete the shared schedule.
- D. In SharePoint Central Administration, delete the shared schedule.

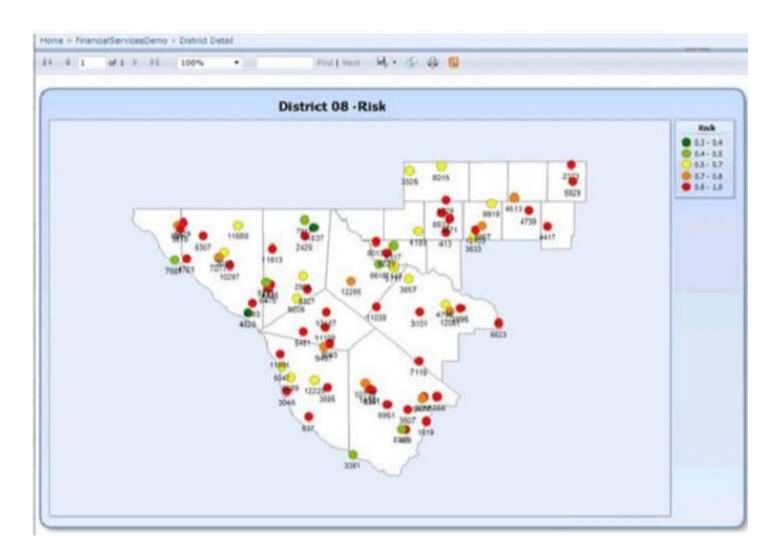
Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 11

You are designing a SQL Server Reporting Services (SSRS) report for a bank. The bank has Automated Teller Machines (ATMs) in several regions. ATM operational data is stored in a Microsoft Azure SQL Database database.

The report must use a map to display the location and status of the ATMs as shown in the following exhibit. (Click the Exhibit button.)



You need to ensure that the report displays only a user selected map region.

Which source of spatial data should you use for the map?

- A. SQL Server spatial query
- B. Map gallery

- C. ESRI shape file
- D. Bing Maps layer

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 12

You are designing a SQL Server Reporting Services (SSRS) report.

The report defines a single SQL Server data source and dataset.

You need to include additional data sourced from a Microsoft Azure SQL Database in the report.

What should you do?

- A. Create a SQL Server data source and then add a dataset that uses the new data source.
- B. Create a Microsoft Azure SQL Database data source and then add a dataset that uses the new data source.
- C. Generate an Atom-compliant data feed for the report.
- D. Create a Microsoft Azure SQL Database dataset that uses the existing data source.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 13

You are developing a new SQL Server Reporting Services (SSRS) report in SQL Server Data Tools (SSDT). This report has a table named Table1 and a textbox named Textbox1.

Table1 is initially visible but the user must be able to choose when to hide it.

You need to develop the report to meet the requirement.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. For the properties of Table1, configure the Display can be toggled by this report item option to use Textbox1.
- B. Configure Textbox1 to drill through to rerun the report to toggle the display of Table1.
- C. For the properties of Table1, configure the Display can be toggled by this report item option to use Table1
- D. Add a parameter to the report so users can choose the display state of Table1.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 14

You are developing a new SQL Server Reporting Services (SSRS) report in SQL Server Data Tools (SSDT).

The report must define a report parameter to prompt the user for the business unit. Each business unit has a unique font scheme combination of font and size properties.

You need to ensure that all of the text boxes in the table headers use the correct business unit font properties.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Add one report variable for FontFamily Assign it with an expression to return the appropriate colors. For each header text box, set the Color and FontSize properties by using the variables.
- B. For each header text box, assign expressions to the FontFamily and FontSize properties.
- C. Add two report variables named FontFamily and FontSize. Assign them with expressions to return the appropriate colors. For each header text box, use expressions to set the FontFamily and FontSize properties by using the variables.
- D. Add two Microsoft Visual C# functions to the code block of the report to implement FontFamily and FontSize functions. For each header text box, use expressions to set the FontFamily and FontSize properties by using the functions.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 15

You install SQL Server Reporting Services (SSRS).

You need to restore a copy of the symmetric key.

Which command should you run?

- A. rskeymgmt -d
- B. rskeymgmt -e -f %temp%\rs.key -p Password1
- C. rskeymgmt -i
- D. rskeymgmt -a -f %temp%\rs.key -p Password1

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 16

You are managing a SQL Server Reporting Services (SSRS) instance in native mode. A role named Folder Access Controller is present on the server.

The Folder Access Controller role consists of only the Set security for individual items task.

When role members open Report Manager, they cannot view folders.

You need to modify the Folder Access Controller role so that the role members can view folders.

Which task should you add to the Folder Access Controller role?

- A. Manage models
- B. Manage reports
- C. View reports
- D. Manage folders

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 17

You are developing a SQL Server Analysis Services (SSAS) multidimensional project.

A fact table is related to a dimension table named DimScenario by a column named ScenarioKey.

The dimension table contains three rows for the following scenarios:

- Actual
- Budget Q1
- Budget Q3

You need to create a dimension to allow users to view and compare data by scenario.

What should you do?

- A. Use role playing dimensions.
- B. Use the Business Intelligence Wizard to define dimension intelligence.
- C. Add a measure that uses the Count aggregate function to an existing measure group.
- D. Add a measure that uses the DistinctCount aggregate function to an existing measure group.
- E. Add a measure group that has one measure that uses the DistinctCount aggregate function.
- F. Add a calculated measure based on an expression that counts members filtered by the Exists and NonEmpty functions.
- G. Add a hidden measure that uses the Sum aggregate function. Add a calculated measure aggregating the measure along the time dimension.
- H. Create several dimensions. Add each dimension to the cube.
- I. Create a dimension. Then add a cube dimension and link it several times to the measure group.
- J. Create a dimension. Create regular relationships between the cube dimension and the measure group. Configure the relationships to use different dimension attributes.
- K. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a regular relationship between the dimension and measure group.
- L. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a many-to-many relationship to link the dimension to the measure group.
- M. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a many-to-many relationship to link the dimension to the measure group.
- N. Create a dimension with one attribute hierarchy. Set the ValueColumn property, set the IsAggregatable property to False, and then set the DefaultMember property. Configure the cube dimension so that it does not have a relationship with the measure group. Add a calculated measure that uses the MemberValue attribute property.
- O. Create a new named calculation in the data source view to calculate a rolling sum. Add a measure that uses the Max aggregate function based on the named calculation.

Correct Answer: K

Section: [none] Explanation

Explanation/Reference:

QUESTION 18

You are designing a SQL Server Analysis Services (SSAS) cube.

You need to create a measure to count unique customers.

What should you do?

- A. Use role playing dimensions.
- B. Use the Business Intelligence Wizard to define dimension intelligence.
- C. Add a measure that uses the Count aggregate function to an existing measure group.
- D. Add a measure that uses the DistinctCount aggregate function to an existing measure group.
- E. Add a measure group that has one measure that uses the DistinctCount aggregate function.
- F. Add a calculated measure based on an expression that counts members filtered by the Exists and NonEmpty functions.
- G. Add a hidden measure that uses the Sum aggregate function. Add a calculated measure aggregating the measure along the time dimension.
- H. Create several dimensions. Add each dimension to the cube.
- I. Create a dimension. Then add a cube dimension and link it several times to the measure group.
- J. Create a dimension. Create regular relationships between the cube dimension and the measure group. Configure the relationships to use different dimension attributes.
- K. Create a dimension with one attribute hierarchy. Set the IsAggrcgatable property to False and then set the DefaultMember property. Use a regular relationship between the dimension and measure group.
- L. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a many-to-many relationship to link the dimension to the measure group.
- M. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a many-to-many relationship to link the dimension to the measure group.
- N. Create a dimension with one attribute hierarchy. Set the ValueColumn property, set the IsAggregatable property to False, and then set the DefaultMember property. Configure the cube dimension so that it does not have a relationship with the measure group. Add a calculated measure that uses the MemberValue attribute property.
- O. Create a new named calculation in the data source view to calculate a rolling sum. Add a measure that uses the Max aggregate function based on the named calculation.

Correct Answer: E Section: [none]

Explanation

Explanation/Reference:

QUESTION 19

You are creating a SQL Server Analysis Services (SSAS) cube.

You need to create a time dimension. It must be linked to a measure group named Sales at the day granularity level. It must also be linked to a measure group named Salary at the month granularity level.

What should you do?

- A. Use role playing dimensions.
- B. Use the Business Intelligence Wizard to define dimension intelligence.
- C. Add a measure that uses the Count aggregate function to an existing measure group.
- D. Add a measure that uses the DistinctCount aggregate function to an existing measure group.
- E. Add a measure group that has one measure that uses the DistinctCount aggregate function.
- F. Add a calculated measure based on an expression that counts members filtered by the Exists and NonEmpty functions.
- G. Add a hidden measure that uses the Sum aggregate function. Add a calculated measure aggregating the measure along the time dimension.
- H. Create several dimensions. Add each dimension to the cube.
- I. Create a dimension. Then add a cube dimension and link it several times to the measure group.
- J. Create a dimension. Create regular relationships between the cube dimension and the measure group. Configure the relationships to use different dimension attributes.
- K. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a regular relationship between the dimension and measure group.
- L. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a many-to-many relationship to link the dimension to the measure group.
- M. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a many-to-many relationship to link the dimension to the measure group.
- N. Create a dimension with one attribute hierarchy. Set the ValueColumn property, set the IsAggregatable property to False, and then set the DefaultMember property. Configure the cube dimension so that it does not have a relationship with the measure group. Add a calculated measure that uses the MemberValue attribute property.
- O. Create a new named calculation in the data source view to calculate a rolling sum. Add a measure that uses the Max aggregate function based on the named calculation.

Correct Answer: J Section: [none]

Explanation

Explanation/Reference:

QUESTION 20

You are developing a SQL Server Analysis Services (SSAS) cube for the sales department at your company.

The sales department requires the following set of metrics:

- Unique count of customers
- Unique count of products sold
- Sum of sales

You need to ensure that the cube meets the requirements while optimizing query response time.

What should you do? (Each answer presents a complete solution. Choose all that apply.)



- A. Place the measures in a single measure group.
- B. Place the distinct count measures in separate measure groups.
- C. Use the additive measure group functions.
- D. Use the semiadditive measure group functions.
- E. Use the Count and Sum measure aggregation functions.
- F. Use the Distinct Count and Sum measure aggregation functions.

Correct Answer: BF Section: [none] Explanation

Explanation/Reference:

QUESTION 21

You are developing a BI Semantic Model (BISM) that will be used to analyze complex budgeting and forecast data sourced from a financial database. The model

will be deployed to a server with 28 GB of RAM.

The source data, located in a SQL Server data warehouse, is currently using 15 terabytes of disk space and is doubling in size every month. The model will be queried by staff in the accounting department by using Microsoft Excel 2010.

You need to ensure the highest query performance and scalability for the accounting department queries.

Which project type should you choose?

- A. Tabular project that uses the In-Memory query mode
- B. PowerPivot workbook deployed to SharePoint
- C. Tabular project that uses the DirectQuery query mode
- D. Multidimensional project

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 22

You are developing a BI Semantic Model (BISM) based on a simple and small dataset sourced from SQL Server. The data size and complexity of the data relationships will not change. The model will be used to produce reports in Power View.

You need to use an appropriate project type.

Which project types should you use? (Each answer presents a complete solution. Choose all that apply.)

- A. A tabular project that uses the In-Memory query mode
- B. A tabular project that uses the DirectQuery query mode
- C. A multidimensional project that uses the MOLAP storage mode
- D. A PowerPivot workbook that is deployed to Microsoft SharePoint Server 2010
- E. A multidimensional project that uses the ROLAP storage mode

Correct Answer: ABD Section: [none] Explanation

Explanation/Reference:

Power View is a thin web client that launches right in the browser from a data model in SharePoint Server 2010. The model can be a PowerPivot model workbook or a tabular model running on a SQL Server 2012 Analysis Services (SSAS) server.

QUESTION 23

You are modifying a SQL Server Analysis Services (SSAS) cube.

Users of the cube report that the precision for the SalesAmount measure is four digits. You need to ensure that the SalesAmount measure stores values to two digits of precision.

What should you do?

- A. Use the FormatString measure property to format SalesAmount as #,##0.00;-#,##0.00
- B. Use the MeasureExpression measure property to change the precision of SalesAmount to two digits.
- C. Use the FormatString measure property to format SalesAmount as Currency.
- D. Add a named query in the data source view that casts the data source column to two digits of precision. Bind the SalesAmount measure to the new query.
- E. Add a named calculation in the data source view that casts the data source column to two digits of precision. Bind the SalesAmount measure to the new column.

Correct Answer: E Section: [none] Explanation

Explanation/Reference:

QUESTION 24

You are developing a multidimensional project that includes a dimension named Organization. The dimension is based on the DimOrganization table in the data warehouse. The following diagram illustrates the table design.

	DimOrganization	
PK	OrganizationKey	
FK2	ParentOrganizationKey PercentageOfOwnership OrganizationName ParentOrganizationName	
FK1	CurrencyKey	

The Organization dimension includes a parent-child hierarchy named Organizations. The dimension includes the following dimension attributes:

- Organization, which is a key attribute
- Organizations, which defines the parent-child hierarchy
- Currency Code, which is a regular attribute
- PercentageOfOwnership, which is a regular attribute

When users browse the dimension, four hierarchies are visible to them.

You need to ensure that the Organization and PercentageOfOwnership hierarchies are not visible to users.

What should you do?

- A. Set the AttributeHierarchyVisible property to False for the Organization and PercentageOfOwnership attributes.
- B. Set the AttributeHierarchyEnabled property to False for the Organization and PercentageOfOwnership attributes.
- C. Delete the Organization and the PercentageOfOwnership attributes.
- D. Set the AttributHierarchyDisplayFolder property to Null for the Organization and PercentageOfOwnership attributes.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

Explanation:

The value of the AttributeHierarchyVisible property determines whether the attribute hierarchy is visible independent of its use in a user-defined hierarchy.

References: https://msdn.microsoft.com/en-us/library/microsoft.analysisservices.dimensionattribute.attributehierarchyvisible.aspx

QUESTION 25

You are developing a SQL Server Analysis Services (SSAS) multidimensional database. The underlying data source does not have a time dimension table.

You need to implement a time dimension.

What should you do?

- A. Use the SQL Server Data Tools Dimension Wizard and generate a time table on the server.
- B. Create a CSV file with time data and use the DMX IMPORT statement to import data from the CSV file.
- C. Create a time dimension by using the Define dimension intelligence option in the Business Intelligence Wizard.
- D. Create a time dimension by using the Define time intelligence option in the Business Intelligence Wizard.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

Explanation:

In Microsoft SQL Server Analysis Services, you can use the Dimension Wizard in SQL Server Data Tools (SSDT) to create a time dimension when no time table is available in the source database.

- * Generate a time table on the server Select this option when you do not have permission to create objects in the underlying data source. The wizard will then generate and store a table on the server instead of in the data source. (The dimension created from a time table on the server is called a server time dimension.) The wizard then creates the server time dimension from this table.
- * Generate a time table in the data source Select this option when you have permission to create objects in the underlying data source. The wizard will then generate a time table and store this table in the data source. The wizard then creates the time dimension from this time table.

References: https://docs.microsoft.com/en-us/sql/analysis-services/multidimensional-models/create-a-time-dimension-by-generating-a-time-table

QUESTION 26

You are developing a SQL Server Analysis Services (SSAS) cube. The cube contains several dimensions, a local measure group, and a linked measure group. Both measure groups use MOLAP partitions.

You need to write-enable one of the linked measure group partitions to support Microsoft Excel 2010 PivotTable What-If Analysis.

What should you do before the partition can be write-enabled?

- A. Set the Type property of the partition's measure group to Forecast.
- B. Implement the linked measure group as a local measure group.
- C. Implement the local measure group as a linked measure group.

D. Set the StorageMode property of the linked measure group to Rolap.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 27

You are working with multiple tabular models deployed on a single SQL Server Analysis Services (SSAS) instance.

You need to ascertain the memory consumed by each object in the SSAS instance.

What should you do?

- A. Use the \$System.discover object memory usage dynamic management view.
- B. Use SQL Server Profiler to review session events for active sessions.
- C. Use the Usage Based Optimization wizard to design appropriate aggregations.
- D. Use the Performance Counter group named Processing.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 28

You are developing a SQL Server Analysis Services (SSAS) tabular project.

You need to grant the minimum permissions necessary to enable users to query data in a tabular model.

Which role permission should you use?

- A. Explorer
- B. Select
- C. Process
- D. Browser

- E. Read Definition
- F. Read

Correct Answer: F Section: [none] Explanation

Explanation/Reference:

QUESTION 29

You are developing a SQL Server Analysis Services (SSAS) tabular database. To maximize performance, queries must be resolved only by using cache.

You need to configure the appropriate query mode.

Which query mode should you select?

- A. DirectQuery with In-Memory
- B. In-Memory with DirectQuery
- C. In-Memory
- D. DirectQuery

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 30

You are developing a SQL Server Analysis Services (SSAS) tabular project.

In the data warehouse, a table named Employee Security defines a relationship between a salesperson's name, logon ID, and assigned sales territory.

You need to ensure that each salesperson has access to data from only the sales territory assigned to that salesperson. You also need to minimize the development effort.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

A. Create a new role with Read permission and then add each salesperson's logon as a member to the role.

- B. Create a separate tabular project for each sales territory. Grant each salesperson access to the corresponding tabular model of the assigned sales territory.
- C. Add the Employee Security table to the model, define the relationships, and then implement dynamic security by using row filters. Grant each salesperson access to the model.
- D. Create a new Active Directory Domain Services (AD DS) security group and add each salesperson as a member. Then create a new role with Read permission. Add the group as a member to the new role.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 31

You develop a SQL Server Analysis Services (SSAS) tabular project. The tabular model loads data from a SQL Server relational database each day.

You define a connection.

You need to ensure that the connection minimizes the attack surface area of the server.

How should you define the impersonation information for the connection? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Use your domain credentials. Grant least privilege to your account in the source database.
- B. Create and use a new Windows domain account. Grant least privilege to this account in the source database.
- C. Use the credentials of the SQL Server Analysis Services (SSAS) service account. Grant least privilege to this account in the source database.
- D. Use SQL Server authentication.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 32

You are developing a SQL Server Analysis Services (SSAS) tabular project.

A column named City must be added to the table named Customer. The column will be used in the definition of a hierarchy. The City column exists in the Geography table that is related to the Customer table.

You need to add the City column to the Customer table.

How should you write the calculation?

- A. =RELATEDTABLE(Geography)
- B. =RELATED(Geography[City])
- C. =Geography[City]
- D. City:=Geography[City]
- E. City:=RELATED(Geography[City])
- F. City :=RELATEDTABLE (Geography)

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 33

You are developing a SQL Server Reporting Services (SSRS) sales summary report.

The report header consists of several images. Report users require PDF exports of the report with no bulky images of the report header.

You need to ensure that the header of the report is hidden when a user exports the report to PDF format.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Set the Hidden property of the report header to (Globals!RenderFormat.Name = "PDF").
- B. Set the Hidden property of the report header to (Globals!RenderFormat.IsInteractive = False).
- C. Set the Hidden property of the report header to FALSE.
- D. Set the Hidden property of the report header to TRUE.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 34

You install SQL Server Reporting Services (SSRS).

You need to back up a copy of the symmetric key.

Which command should you run?

- A. rskeymgmt -a -f %temp%\rs.key -p Password1
- B. rskeymgmt -d
- C. rskeymgmt -i
- D. rskeymgmt -e -f %temp%\rs.key -p Password1

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 35

You are developing a new SQL Server Reporting Services (SSRS) report in SQL Server Data Tools (SSDT).

The report contains tables, images, charts, page breaks, gauges, and indicators.

You need to ensure that the reports can be exported to Microsoft Excel and PDF formats and do not have any layout issues.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. During development, preview the report in the SSDT preview tab to validate its default HTML rendering.
- B. After development, test the report in a web browser.
- C. Increase the value of the Width property of the report body.
- D. During development, preview the report in the SSDT preview tab and export it to the other rendering formats.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 36

You are designing a SQL Server Reporting Services (SSRS) report to display vineyard names and their year-to-date (YTDJ grape yield.

Grape yield values are classified in three bands:

- High Yield
- Medium Yield
- Low Yield

You add a table to the report. Then you define two columns based on the fields named VineyardName and YTDGrapeYield

You need to set the color of the vineyard text to red, yellow, or blue, depending on the value of the YTD grape yield values.

What should you do?

- A. Use an expression for The Color property of the vineyard text box.
- B. Use an expression for the TextDecoration property of the vineyard text box.
- C. Use an expression for the Style property of the vineyard text box.
- D. Use an expression for the Font property of the vineyard text box.
- E. Add an indicator to the table.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 37

A large manufacturing company has manufacturing plants in many states. Each state has a dedicated SQL Server instance that stores its manufacturing data. Each SQL Server instance is configured identically and all instances have identical database structures.

You are developing a daily report that summarizes information on manufacturing activity.

The report has the following requirements:

- It must have a stale name as one of the report parameters.
- It must provide a daily summary of manufacturing activity of a selected state.
- It must require minimal development and maintenance effort.

You need to develop the report to meet the requirements.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Build one report for each state and instruct users to execute reports as needed.
- B. Use a report-specific data source that defines an expression-based connection string based on the state parameter.
- C. Build a centralized data repository, schedule a regular Extract Transform, and Load (ETL) process on all manufacturing data, and then use the repository to generate the report.
- D. Use a shared data source that defines an expression-based connection string based on the state parameter.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 38

You are creating a new report in SQL Server Report Builder. You add a Microsoft Azure SQL Database data source. Then you add a dataset that has four fields named Year, Country, Category, and Sales.

You must design a matrix as shown in the following table.

	CY 2003	CY2004
Accessories	293,710	407,050
Bikes	9,359,103	9,162,325
Clothing	138,248	201,525
Australia	3,033,784	2,563,884
Canada	535,784	673,628
France	1,026,325	922,179
Germany	1,058,406	1,076,891
United Kingdom	1,298,249	1,210,286
United States	2,838,512	3,324,031
Total	9,791,060	9,770,900

The category rows (the first three rows as shown in the diagram) must present total sales amount by category. The country rows (the next six rows as shown in the diagram) must present total sales amount by country. The total row must present the total sales for each year.

You add a matrix to the report. You add a grouping of the Category field on the rows and a grouping of the Year field on the columns.

You need to add the countries on the rows of the matrix.

Which Row Group option should you select when you add the group?

- A. Adjacent Below
- B. Child Group
- C. Parent Group
- D. Adjacent Above

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 39

You are creating a SQL Server Analysis Services (SSAS) multidimensional database.

Users need a time dimension for:

- Dates
- Delivery dates
- Ship dates

You need to implement the minimum number of required SSAS objects.

What should you do?

- A. Use role playing dimensions.
- B. Use the Business Intelligence Wizard to define dimension intelligence.
- C. Add a measure that uses the Count aggregate function to an existing measure group.
- D. Add a measure that uses the DistinctCount aggregate function to an existing measure group.
- E. Add a measure that uses the LastNonEmpty aggregate function. Use a regular relationship between the time dimension and the measure group.
- F. Add a measure group that has one measure that uses the DistinctCount aggregate function.
- G. Add a calculated measure based on an expression that counts members filtered by the Exists and NonEmpty functions.
- H. Add a hidden measure that uses the Sum aggregate function. Add a calculated measure aggregating the measure along the time dimension.
- I. Create several dimensions. Add each dimension to the cube.
- J. Create a dimension. Then add a cube dimension and link it several times to the measure group.

- K. Create a dimension. Create regular relationships between the cube dimension and the measure group. Configure the relationships to use different dimension attributes.
- L. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a regular relationship between the dimension and measure group.
- M. Create a dimension with one attribute hierarchy. Set the IsAggregatable property to False and then set the DefaultMember property. Use a many-to-many relationship to link the dimension to the measure group.
- N. Create a dimension with one attribute hierarchy. Set the ValueColumn property, set the IsAggregatable property to False, and then set the DefaultMember property. Configure the cube dimension so that it does not have a relationship with the measure group. Add a calculated measure that uses the MemberValue attribute property.
- O. Create a new named calculation in the data source view to calculate a rolling sum. Add a measure that uses the Max aggregate function based on the named calculation.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 40

You are modifying a SQL Server Analysis Service (SSAS) cube.

The cube consists of a single measure group that contains the following measures:

- Total Quantity On Hand
- Average Quantity On Hand

The measure group has a single partition that uses the MOLAP storage mode.

You need to modify the cube design to ensure that the Total Quantity On Hand measure is updated in real-time and that Average Quantity On Hand measure is updated hourly.

What should you do?

- A. Change the storage mode of the partition to use proactive caching with minimum latency.
- B. Create an XMLA script that will process the cube and then use SQL Server Agent to execute the script continuously.
- C. Create a new measure group for the Average Quantity On Hand measure. Configure the storage mode for the new measure group's partition to ROLAP.
- D. Create a new measure group for the Total Quantity On Hand measure. Configure the storage mode for the new measure group's partition to ROLAP.

Correct Answer: D Section: [none]

Explanation

Explanation/Reference:

QUESTION 41

A multidimensional SQL Server Analysis Services (SSAS) database will be tested next week.

During the test period, users will access the database for 30 days. Multidimensional Expressions (MDX) queries generated during the test period must represent the variety of queries that will be used in the production environment.

After testing completes, you need to implement aggregations for every partition in the solution while minimizing development effort. You need to ensure that the aggregations are optimal.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Set up a query log and record all user queries during the test period. After completion of the test, use the Usage Based Optimization Wizard to define aggregations for each partition.
- B. During the test period, identify long-running queries by using SQL Server Profiler. Use those queries to design aggregations by using the DesignAggregations command in XML for Analysis (XMLA).
- C. During the test period, run SQL Server Profiler for 10 minutes every day and record all queries executed in those 10 minutes. Use the Aggregation Design Wizard to design the aggregations.
- D. Develop a SQL Server Integration Services (SSIS) package by using a Script task and then use Analysis Management Objects (AMO) to design the aggregations.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 42

You are designing a SQL Server Analysis Services (SSAS) cube based on a Microsoft Azure SQL Database data warehouse.

You need to implement a degenerate dimension.

What should you do?

A. Use the fact table as the data source for the dimension.

- B. Create snowflake dimension tables based on normalized views of the fact table in the data source.
- C. Create a junk dimension table based on the fact table in the data source.
- D. Add a surrogate key to the fact table and use it as the degenerate dimension key.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 43

You are designing a SQL Server Analysis Services (SSAS) cube for the sales department at your company.

The sales department has the following requirements for the cube:

- Include a year-over-year (YOY) calculation
- Include a month-over-month (MOM) calculation

You need to ensure that the calculations are implemented in the cube.

Which Multidimensional Expressions (MDX) function should you use?

- A. UNREGINTERCEPT()
- B. LASTPERIODS()
- C. TIMEINTELLIGENCE()
- D. PARALLELPERIOD()

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 44

You are developing a SQL Server Analysis Services (SSAS) cube.

You must create a four-level hierarchy for the employee dimension. Each level must be associated with an attribute in the employee dimension table. Two thirds of the dimension data contain values for all four attributes. The remainder of the dimension data contains values for the first three of the four attributes only.

You need to create the hierarchy so that logically missing members will not be shown by the reporting tool.

Which type of hierarchy should you create?

- A. A parent-child hierarchy
- B. A sparse hierarchy
- C. A ragged hierarchy



D. A balanced hierarchy

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 45

You are adding dimensions and a new measure group named Accounts Receivable to an existing SQL Server Analysis Services (SSAS) cube.

Date is one of the existing dimensions in the SSAS database. The underlying fact table for the measure group is associated with multiple dates, including InvoiceDate, DueDate and PaymentDate.

You need to ensure that users can slice the Accounts Receivable measures by InvoiceDate, DueDate, and PaymentDate. You also need to ensure that the time required to process the database is minimized.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Create three new perspectives named InvoiceDate, DueDate, and PaymentDate.
- B. Create three independent dimensions named InvoiceDate, DueDate and PaymentDate and then link all three of them to the Accounts Receivable measure group.
- C. Create cube dimensions named InvoiceDate, DueDate, and PaymentDate by using the existing Date dimension in the database.
- D. Add three attributes named InvoiceDate, DueDate, and PaymentDate to the existing Date dimension in the database.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 46

You are developing a SQL Server Analysis Services (SSAS) cube named Sales Planning. The cube consists of two measure groups named Sales and Planning. Each measure group is based on a data warehouse fact table and consists of a single MOLAP partition that has the same name as its measure group.

The Planning measure group consists of two measures:

- Forecast, which uses the Sum aggregate function
- Forecast Count, which uses the Count aggregate function

Users contribute planning values by using a legacy application. An extract, transform, load (ETL) process is scheduled to periodically transfer the planning values from the database of the legacy application to the data warehouse.

Financial analysts query the Sales Planning cube and report that the planning values are sometimes out of date. A new company requirement mandates that the planning values be entered directly into the cube by using Microsoft Excel 2010 PivotTable What-If Analysis.

You need to write-enable the Planning partition.

What should you do before write-enabling the partition?

- A. Set the StorageMode property of the Planning partition to Rolap
- B. Set the ProcessingMode property of the Planning partition to LazyAggregations.
- C. Set the ProcessingMode property of the Planning measure group to LazyAggregations.
- D. Remove the Forecast Count measure.
- E. Set the Type property of the Planning measure group to Budget.
- F. Convert the Planning measure group to a linked measure group.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

Explanation: A cube can be write-enabled only if all its measures use the **Sum** aggregate function.

QUESTION 47

You are developing a BI Semantic Model (BISM) that retrieves data from several sources including a Microsoft Azure SQL Database database and an OData data feed. The model will be deployed to a server with significantly more memory than the total size of the source data.

You have the data feed URL, which you will use when developing the model in SQL Server Data Tools (SSDT).

The model must meet the following requirements:

- Maximize performance
- Data latency of up to one month is acceptable

You need to choose a project type and a data access mode to meet the requirements.

What should you do?

- A. Select the multidimensional project type and use the ROLAP storage mode.
- B. Select the tabular project type and use the In-Memory query mode.
- C. Select the tabular project type and use the DirectQuery query mode.
- D. Select the multidimensional project type and use the MOLAP storage mode.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 48

You are modifying a SQL Server Analysis Services (SSAS) cube.

The cube consists of a single measure group that contains the following measures:

- Total Quantity On Hand
- Average Quantity On Hand

The measure group has a single partition that uses the MOLAP storage mode.

You need to modify the cube design to ensure that the Total Quantity On Hand measure is updated in real-time and that Average Quantity On Hand measure is updated hourly.

What should you do?

A. Create a new measure group for the Total Quantity On Hand measure. Configure the storage mode for the new measure group's partition to ROLAP.

- B. Create a drillthrough action that will query the underlying data source in real time for the Total Quantity On Hand measure.
- C. Change the storage mode of the partition to ROLAP.
- D. Add an additional MOLAP partition to the measure group.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 49

You are conducting a design review of a multidimensional project.

In the Customer Geography dimension, all non-key attributes relate directly to the key attribute.

The underlying data of the Customer Geography dimension supports relationships between attributes.

You need to increase query and dimension processing performance.

What should you do?

- A. For the dimension attributes of the Customer Geography dimension, define appropriate attribute relationships.
- B. For the dimension attributes of the Customer Geography dimension, set the GroupingBehavior property to EncourageGrouping.
- C. For the Customer Geography dimension, set the Processing Mode property to LazyAggregations.
- D. For the Customer Geography dimension, set the ProcessingPriority property to 1.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 50

You are modifying a SQL Server Analysis Services (SSAS) cube that aggregates order data from a Microsoft Azure SQL Database database. The existing database contains a customer dimension.

The marketing team has requested that customer marketing categories be added to the database.

The marketing categories must meet the following requirements:

- A customer member must be able to belong to multiple category members.
- A category member must be able to group several customer members.
- The marketing team must be able to create new categories every month in the data source.

You need to implement the appropriate solution to meet the requirements while ensuring that the amount of development and maintenance time is minimized.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Create a dimension named Marketing Category Name and then configure a many-to-many relationship.
- B. Create a dimension named Marketing Category Name and then configure a regular relationship.
- C. Add an attribute hierarchy named Marketing Category Name to the customer dimension.
- D. Add an attribute hierarchy for each marketing category to the customer dimension. Configure each hierarchy to have two members named Yes and No.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 51

You are working with a SQL Server Reporting Services (SSRS) instance in native mode. An item role named Developer is present on the server.

The Developer role cannot view and modify report caching parameters.

You need to ensure that the Developer role can view and modify report caching parameters.

Which task should you add to the Developer role?

- A. Manage individual subscriptions
- B. View data sources
- C. Manage report history
- D. Manage all subscriptions

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 52

You manage a SQL Server Reporting Services (SSRS) instance. The ReportingServicesService.exe.config file has been modified to enable logging.

Some users report that they cannot access the server.

You need to ascertain the IP addresses of the client computers that are accessing the server.

What should you do?

- A. View the ExecutionLog view in the Report Server database.
- B. View the Report Server service trace log.
- C. View the Report Server HTTP log.
- D. View the Windows System event log.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 53

A multinational retailer has retail locations on several continents. A single SQL Server Reporting Services (SSRS) instance is used for global reporting.

A SQL Server Analysis Services (SSAS) instance for each continent hosts a multidimensional database named RetailSales. Each RetailSales database stores data only for the continent in which it resides. All of the SSAS instances are configured identically. The cube names and objects are identical.

Reports must meet the following requirements:

- A report parameter named ServerName must be defined in each report.
- When running a report, users must be prompted to select a server instance.
- The report data source must use the Microsoft SQL Server Analysis Services data source type.

You need to create a data source to meet the requirements.

How should you define the expression that is assigned to the connection string property of the data source?

- A. ="Server=" & Parameters|ServerName.Value & "; Initial Catalog=RetailSales"
- B. ="Data Source=@ServerName; Initial Catalog=RetailSales"

- C. ="Data Source=" & Parameters!ServerName.Value & ":Initial Catalog=RetailSales"
- D. ="Server=" & Parameters!ServerName.Value
- E. ="Server=@ServerName; Initial Catalog=RetailSales"

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 54

You are developing a SQL Server Reporting Services (SSRS) report that renders in HTML. The report includes a dataset with fields named Description, Price, and Color. The report layout includes a table that displays product details and also includes columns named Description, Price, and Color.

You need to modify the report so that users can sort products by the Price column.

What should you do?

- A. Set the SortExpression value to = Fields!Price.Description for the Price text box.
- B. Set the SortExpression property to =Fields!Price.Name for the Price text box.
- C. Set the SortExpression property to =Fields!Price.Value for the Price text box.
- D. Add a custom action to the Price text box.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 55

You are developing a SQL Server Analysis Services (SSAS) tabular project.

A model contains tables and columns that must not be visible to the user. The columns and tables cannot be removed because they are used in calculations. The calculations are used to calculate the budget and forecast for the current quarter.

You need to hide the tables and columns.

What should you do?

- A. Before adding the forecast calculations to the model, right-click the applicable tables and columns and select the Hide option.
- B. After adding the budget calculations to the model, in the Properties window for the applicable tables and columns, set the Visible property to True.
- C. Before adding the forecast calculations to the model, right-click the applicable tables and columns and select the Hide from Client Tools option.
- D. After adding the budget calculations to the model, in the Properties window for the applicable tables and columns, set the Enabled property to False.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 56

You are developing a SQL Server Analysis Services (SSAS) tabular project. A model defines a measure named Revenue and includes a table named Date. The table includes year, semester, quarter, month, and date columns. The Date column is of data type Date. The table contains a set of contiguous dates.

You need to create a measure to report on year-over-year growth of revenue.

What should you do? (Each answer presents a complete solution. Choose all that apply.)

```
Define the following calculation.
TA.
       Year Over Year Revenue Growth:=[Revenue] - CALCULATE([Revenue],
        SAMEPERIODLASTYEAR('Date'[Date]))
       Define the following calculation.
       Year Over Year Revenue Growth:=CALCULATE([Revenue], DATEADD('Date'[Date], 1, YEAR))
       Use the Business Intelligence Wizard and then use the Define time intelligence enhancement.
       Define the following calculation.
       Year Over Year Revenue Growth:=[Revenue] - CALCULATE([Revenue],
        PARALLELPERIOD('Date'[Date], -12, MONTH))
A. Option A
```

- B. Option B
- C. Option C
- D. Option D

Correct Answer: ACD Section: [none] **Explanation**

Explanation/Reference:

QUESTION 57

You are developing a SQL Server Analysis Services (SSAS) tabular project. The model has tables named Invoice Line Items and Products.

The Invoice Line Items table has the following columns:

- Product Id
- Unit Sales Price

The Unit Sales Price column stores the unit price of the product sold.

The Products table has the following columns:

- Product Id
- Maximum Sales Price

The Maximum Sales Price column is available only in the Products table.

You add a column named Is Overpriced to the Invoice Line Items table. The Is Overpriced column must store a value of TRUE if the value of the Unit Sales Price is greater than the value of the Maximum Sales Price. Otherwise, a value of FALSE must be stored.

You need to define the Data Analysis Expressions (DAX) expression for the Is Overpriced column.

Which DAX formula should you use? (Each answer represents a complete solution. Choose all that apply.)

```
=IF(LOOKUPVALUE(Products[Unit Sales Price], Products[Product Id],
       [Product Id]) > [Maximum Sales Price]), TRUE, FALSE)
      =IF([Unit Sales Price] > RELATED(Products[Maximum Sales Price]), TRUE, FALSE)
C.
      =IF([Unit Sales Price] > LOOKUPVALUE(Products[Maximum Sales Price],
       Products[Product Id], [Product Id]), TRUE, FALSE)
     =IF(RELATED(Products[Unit Sales Price]) > [Maximum Sales Price], TRUE, FALSE)
A. Option A
```

- B. Option B
- C. Option C
- D. Option D

Correct Answer: BC Section: [none] Explanation

Explanation/Reference:

Explanation:

B: RELATED Function

Returns a related value from another table.

-The RELATED function requires that a relationship exists between the current table and the table with related information.

You specify the column that contains the data that you want, and the function follows an existing many-to-one relationship to fetch the value from the specified column in the related table.

C:

The lookupvalue function returns the value in result_columnName for the row that meets all criteria specified by search_columnName and search_value. Syntax:

LOOKUPVALUE(< result columnName>, < search value> [, < search columnName>, < search value>]...)

Note:

The syntax of DAX formulas is very similar to that of Excel formulas, and uses a combination of functions, operators, and values.

QUESTION 58

You are developing a SQL Server Analysis Services (SSAS) tabular project for a Power View solution.

You need to grant permission for salespersons to view only the data based on their sales territory.

What should you do?

- A. Create a member and then create a Data Analysis Expressions (DAX) filter.
- B. Create a member and then create a Multidimensional Expressions (MDX) filter.
- C. Use SQL Server Management Studio to create a role. Then create a Data Analysis Expressions (DAX) filter.
- D. Use SQL Server Management Studio to create a role. Then create a Multidimensional Expressions (MDX) filter.

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 59

A production SQL Server Analysis Services (SSAS) cube is processed daily. The users query products by using a hierarchy named Products from a dimension named Product.

The DimProduct table in the data source view is used as the source of the Product dimension. The table has the following structure.

```
CREATE TABLE [dbo].[DimProduct](
  [DimensionKey] [int] IDENTITY(1,1) NOT NULL,
  [ProductKey] [int] NOT NULL,
  [ProductName] [varchar](50) NOT NULL,
  [SubCategoryKey] [int] NOT NULL,
  [SubCategoryName] [varchar](50) NOT NULL,
  [CategoryKey] [int] NOT NULL,
  [CategoryName] [varchar](50) NOT NULL
) ON [PRIMARY]
```

The **Product** dimension has three attribute hierarchies:

- Product
- SubCategory
- Category

The attributes have the following relationships defined: Product > Subcategory > Category. Each attribute has a key and a name sourced from the related key and name columns in the DimProduct table.

During processing, you receive the following error message: 'Errors in the OLAP storage engine: A duplicate attribute key has been found when processing: Table: 'dbo DimProduct', Column: 'SubCategoryKey1, Value: "23'. The attribute is Subcategory'."

You verify that the data is accurate.

You need to ensure that the dimension processes successfully.

What should you do?

- A. Delete the Products hierarchy.
- B. Relate the Subcategory and Category attributes directly to the Product attribute.
- C. Remove the duplicate data from the DimProduct table.
- D. Remove the Subcategory attribute.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 60

You have a SQL Server Analysis Services (SSAS) database named DB1 on a server named Server1.

You need to deploy DB1 from Server1 to four other servers. If the destination server already contains a copy of DB1, the database must be updated only. If the destination server does not contain a copy of DB1, the database must be copied to the destination server.

What is the best deployment option to use? More than one answer choice may achieve the goal. Select the BEST answer.

- A. Analysis Services Deployment Wizard
- B. Analysis Management Objects (AMO) automation
- C. Backup and Restore
- D. Synchronize Database Wizard

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

Explanation:

In the Synchronize Database Wizard dialog box, type the name of the source server and source database in the appropriate fields.

Synchronization will occur for source and destination databases that have the same name. If the destination server already has a database that shares the same name as the source database, the destination database will be updated with the metadata and data of the source. If the database does not exist, it will be created on the destination server. Click Next.

Ref: http://technet.microsoft.com/en-us/library/ms174928(v=sql.110).aspx

QUESTION 61

You are deploying an update to a SQL Server Analysis Services (SSAS) cube to a production environment.

The production database has been configured with security roles.

You need to preserve the existing security roles in the production database. Database roles and their user accounts from the development environment must not be deployed to the production server.

Which deployment method should you use?

A. Use the SQL Server Analysis Services Deployment Wizard.

- B. Backup and restore the database.
- C. Use the SQL Server Analysis Services Migration Wizard.
- D. Deploy the project from SQL Server Data Tools to the production server.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 62

You maintain a multidimensional Business Intelligence Semantic Model (BISM) that was developed with default settings.

The model has one cube and the cube has one measure group. The measure group is based on a very large fact table and is partitioned by month. The fact table is incrementally loaded each day with approximately 800,000 new rows.

You need to ensure that all rows are available in the cube while minimizing the processing time.

Which processing option should you use?

- A. Process Index
- B. Process Data
- C. Process Add
- D. Process Default
- E. Process Clear
- F. Process Full

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

QUESTION 63

You are modifying a SQL Server Analysis Services (SSAS) cube.

Users of the cube report that the precision for the TransactionCost measure is five digits.

You need to ensure that the TransactionCost measure stores values to two digits of precision.

What should you do?

- A. Use the FormatString measure property to format TransactionCost as Currency.
- B. Add a named calculation in the data source view that casts the data source column to two digits of precision. Bind the TransactionCost measure to the new column.
- C. Add a named query in the data source view that casts the data source column to two digits of precision. Bind the TransactionCost measure to the new query.
- D. Use the MeasureExpression measure property to change the precision of TransactionCost to two digits.
- E. Use the FormatString measure property to format TransactionCost as #, ##0.00;-#,##0.00.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 64

You are modifying a SQL Server Analysis Services (SSAS) cube that aggregates mobile phone usage data from a Microsoft Azure SQL Database database. The existing database contains a device dimension.

The Research and Development team has requested that capabilities be added to the database.

The capabilities must meet the following requirements:

- A device member must be able to have multiple capability members.
- A capability member must be able to belong to several device members.
- The Research and Development team must be able to create new capabilities every quarter in the data source.

You need to implement the appropriate solution to meet the requirements while ensuring that the amount of development and maintenance time is minimized.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Create a dimension named Capability Name and then configure a many-to-many relationship.
- B. Add an attribute hierarchy for each capability to the customer dimension. Configure each hierarchy to have two members named Yes and No.
- C. Create a dimension named Capability Name and then configure a regular relationship.
- D. Add an attribute hierarchy named Capability Name to the customer dimension.

Correct Answer: A

Section: [none] Explanation

Explanation/Reference:

QUESTION 65

You develop a SQL Server Analysis Services (SSAS) stored procedure.

You need to ensure that developers can create Multidimensional Expressions (MDX) calculations that use the stored procedure.

What should you do?

- A. Register the assembly on the SSAS server instance.
- B. Copy the assembly to the SSAS installation directory and register it by using the CREATE ASSEMBLY T-SQL command.
- C. Register the assembly on the SSAS server by using regedit.exe.
- D. Register the assembly on the SharePoint server by using regedit.exe.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

QUESTION 66

You are developing a SQL Server Analysis Services (SSAS) tabular project. A model defines a measure named Profit and includes a table named Date. The table includes year, semester, quarter, month, and date columns. The Date column is of data type Date. The table contains a set of contiguous dates.

You need to create a measure to report on year-over-year growth of profit.

What should you do? (Each answer presents a complete solution. Choose all that apply.)

```
□A Define the following calculation.
    Year Over Year Profit Growth:=CALCULATE([Profit], DATEADD('Date'[Date], 1, YEAR))

□B. Define the following calculation.
    Year Over Year Profit Growth:=[Profit] - CALCULATE([Profit], PARALLELPERIOD('Date'[Date], -12, MONTH))

□C. Define the following calculation.
    Year Over Year Profit Growth:=[Profit] - CALCULATE([Profit], SAMEPERIODLASTYEAR('Date'[Date]))

□D. Use the Business Intelligence Wizard and then use the Define time intelligence enhancement.
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: BCD Section: [none] Explanation

Explanation/Reference:

QUESTION 67

You are developing a SQL Server Analysis Services (SSAS) tabular project.

You need to grant permission for salespersons to be able to view only the data based on their sales territory.

What should you do?

- A. Create a member and then create a Multidimensional Expressions (MDX) filter.
- B. Create a member and then create a Data Analysis Expressions (DAX) filter.

- C. Create a role and then create a Multidimensional Expressions (MDX) filter.
- D. Create a role and then create a Data Analysis Expressions (DAX) filter.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 68

You are designing a SQL Server Reporting Services (SSRS) report based on a SQL Server Analysis Services (SSASJ cube.

The cube contains a Key Performance Indicator (KPI) to show if a salesperson's sales are off target slightly off target, or on target.

You need to add a report item that visually displays the KPI status value as a red, yellow, or green circle.

Which report item should you add?

- A. Linear Gauge
- B. Indicator
- C. Data Bar
- D. Radial Gauge
- E. Sparkline

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 69

You are developing a new SQL Server Reporting Services (SSRS) report in SQL Server Data Tools (SSDT).

The report must define a report parameter to prompt the user for the business unit. Each business unit has a unique color scheme combination of foreground and background colors.

You need to ensure that all of the text boxes in the table headers use the correct business unit colors.

What should you do? (More than one answer choice may achieve the goal. Select the BEST answer.)

- A. Add one report variable for Color. Assign it with an expression to return the appropriate colors. For each header text box, set the Color and BackgroundColor properties by using the variable.
- B. Add two report variables named Color and BackgroundColor. Assign them with expressions to return the appropriate colors. For each header text box, use expressions to set the Color and BackgroundColor properties by using the variables.
- C. For each header text box, assign expressions to the Color and BackgroundColor properties.
- D. Add two Microsoft Visual C# functions to the code block of the report to implement Color and BackgroundColor functions. For each header text box, use expressions to set the Color and BackgroundColor properties by using the functions.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 70

You are designing a SQL Server Reporting Services (SSRS) report to display product names and their year-to-date (YTD) sales quantity YTD sales quantity values are classified in three bands:

High Sales, Medium Sales, and Low Sales.

You add a table to the report. Then you define two columns based on the fields named ProductName and YTDSalesQuantity.

You need to set the color of the product text to red, yellow, or blue, depending on the value of the YTD sales quantity values.

What should you do?

- A. Use an expression for the TextDecoration property of the text box.
- B. Use an expression for the Style property of the text box.
- C. Add an indicator to the table.
- D. Use an expression for the Font property of the text box.
- E. Use an expression for the Color property of the text box.

Correct Answer: E Section: [none] Explanation

Explanation/Reference:

QUESTION 71

You are developing a SQL Server Analysis Services (SSAS) tabular project. The model has tables named Invoice Line Items and Products.

The Invoice Line Items table has the following columns:

- Product Id
- Unit Sales Price

The Unit Sales Price column stores the unit price of the product sold.

The Products table has the following columns:

- Product Id
- Minimum Sales Price

The Minimum Sales Price column is available only in the Products table.

You add a column named Is Undersell to the Invoice Line Items table. The Is Undersell column must store a value of TRUE if the value of the Unit Sales Price is less than the value of the Minimum Sales Price. Otherwise, a value of FALSE must be stored.

You need to define the Data Analysis Expressions (DAX) expression for the Is Undersell column.

Which DAX formula should you use? (Each answer represents a complete solution. Choose all that apply.)

- A. =IF([Unit Sales Price] < RELATED(Products[Minimum Sales Price]), TRUE, FALSE)
- B. =IF (RELATED(Products[Unit Sales Price]) < [Minimum Sales Price], TRUE, FALSE)
- C. =IF([Unit Sales Price]) < LOOKUPVALUE(Products[Minimum Sales Price], Products[Product Id], [Product id]), TRUE, FALSE)
- D. =IF(LOOKUPVALUE (Products[Unit Sales Price], Products[Product Id], [Product id])<[Minimum Sales price]), TRUE, FALSE)

Correct Answer: AC Section: [none] Explanation

Explanation/Reference:

Explanation:

A: RELATED Function

Returns a related value from another table.

The RELATED function requires that a relationship exists between the current table and the table with related information.

You specify the column that contains the data that you want, and the function follows an existing many-to-one relationship to fetch the value from the specified column in the related table.

C: The lookupvalue function returns the value in result_columnName for the row that meets all criteria specified by search_columnName and search_value.

LOOKUPVALUE(<result_columnName>, <search_value>[,<search_columnName>, <search_value>]...)

Note:

The syntax of DAX formulas is very similar to that of Excel formulas, and uses a combination of functions, operators, and values.

QUESTION 72

You are modifying a SQL Server Analysis Services (SSAS) multidimensional database.

You have identified a dimension that is no longer used by any cubes.

You need to delete the dimension.

What should you do?

- A. Write a T-SQL command to drop the dimension from the database.
- B. Script the deletion of the dimension as an XMLA command for execution against the production model.
- C. Use the SQL Server Analysis Service Migration Wizard.
- D. Deploy the project from the development environment by using SQL Server Management Studio.

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

QUESTION 73

You execute the following code:

```
CREATE TABLE dbo.Customers

(
    id int PRIMARY KEY
    CustomerName char (10)
)

You create a nonclustered index named IX_CustomerName on the CustomerName column.
You execute the following query:
SELECT * FROM dbo.Customers
WHERE LEFT (CustomerName, 1) = 'a'
```

You need to reduce the amount of time it takes to execute the query.

What should you do?

- A. Replace LEFT (CustomerName, 1) = 'a' with CustomerName LIKE 'a%'.
- B. Partition the table and use the CustomerName column for the partition scheme.
- C. Replace LEFT (CustomerName, 1) = 'a' with SUBSTRING (CustomerName, 1/1) = 'a'.
- D. Replace IX_CustomerName with a clustered index.

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

Explanation:

LEFT() is a function, and it would result in an index scan where like '%' would result in index seek which is more efficient.

References: http://www.mssqltips.com/sqlservertip/1236/avoid-sql-server-functions-in-the-where-clause-for-performance/

QUESTION 74

You have a server that has SQL Server 2012 installed.

You need to identify which parallel execution plans are running in serial.

Which tool should you use?

- A. Data Profile Viewer
- B. Database Engine Tuning Advisor
- C. Performance Monitor
- D. Extended Events

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

QUESTION 75

You have a database named database1. Database developers report that there are many deadlocks. You need to implement a solution to monitor the deadlocks.

The solution must meet the following requirements:

- Support real-time monitoring.
- Be enabled and disabled easily.
- Support querying of the monitored data.

What should you implement? More than one answer choice may achieve the goal. Select the BEST answer.

- A. An Extended Events session
- B. A SQL Server Profiler template
- C. Log errors by using trace flag 1204
- D. Log errors by using trace flag 1222

Correct Answer: A Section: [none] Explanation

Explanation/Reference:

Explanation:

There are a few ways you can track down queries that are causing deadlocks. For example, you can use the Deadlock Graph as shown in the previous tip SQL Server Profiler Graphical Deadlock Chain. Another solution is using a trace flag to write the deadlock information to the error log. You can also implement trace flag 1222 to do just that.

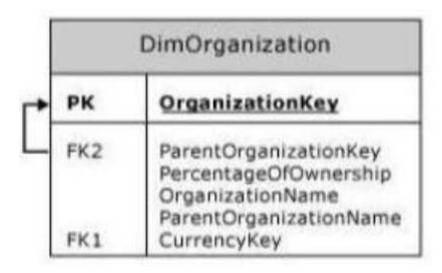
References: https://www.mssqltips.com/sglservertip/2130/finding-sql-server-deadlocks-using-trace-flag-1222/

QUESTION 76

You are developing a multidimensional project that includes a dimension named Organization.

The dimension is based on the DimOrganization table in the data warehouse.

The following diagram illustrates the table design.



The Organization dimension includes a parent-child hierarchy named Organizations.

The dimension includes the following dimension attributes:

- Organization, which is a key attribute
- Organizations, which defines the parent-child hierarchy
- Currency Code, which is a regular attribute

When users browse the dimension, three hierarchies are visible to them.

You need to ensure that the Organization hierarchy is not visible to users.

What should you do?

A. Set the AttributeHierarchyDisplayFolder property to Null for the Organization attribute.

- B. Delete the Organization attribute.
- C. Set the AttributeHierarchyEnabled property to False for the Organization attribute.
- D. Set the AttributeHierarchyVisible property to False for the Organization attribute.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

The DimensionAttribute.AttributeHierarchyVisible Property gets or sets whether the attribute hierarchy is visible to client applications.

References: https://msdn.microsoft.com/en-us/library/microsoft.analysisservices.dimensionattribute.attributehierarchyvisible.aspx

QUESTION 77

You are modifying a SQL Server Analysis Services (SSAS) multidimensional database.

You have identified a dimension that is no longer used by any cubes.

You need to delete the dimension.

What should you do?

- A. Write a Multidimensional Expressions (MDX) command to drop the dimension from the database.
- B. Write a Data Mining Extensions (DMX) command to drop the dimension from the database.
- C. Write a T-SQL command to drop the dimension from the database.
- D. Delete the dimension by using SQL Server Management Studio Object Explorer.

Correct Answer: D Section: [none] Explanation

Explanation/Reference:

Explanation:

To delete a dimension in SQL Server Data Tools.

In Solution Explorer, right-click the dimension that you want to delete, and then click Delete.

References: https://docs.microsoft.com/en-us/sql/analysis-services/multidimensional-models/database-dimensions-modify-or-delete-a-database-dimension-in-solution-explorer

QUESTION 78

You have a database for a mission-critical web application. The database is stored on a SQL Server 2012 instance and is the only database on the instance. The application generates all T-SQL statements dynamically and does not use stored procedures.

You need to maximize the amount of memory available for data caching.

Which advanced server option should you modify?

- A. Scan for Startup Procs
- B. Allow Triggers to Fire Others
- C. Enable Contained Databases
- D. Optimize for Ad hoc Workloads

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

Explanation:

A contained database is a database that is isolated from other databases and from the instance of SQL Server that hosts the database. SQL Server helps user to isolate their database from the instance in 4 ways.

Much of the metadata that describes a database is maintained in the database. (In addition to, or instead of, maintaining metadata in the master database.) All metadata are defined using the same collation.

User authentication can be performed by the database, reducing the databases dependency on the logins of the instance of SQL Server.

The SQL Server environment (DMV's, XEvents, etc.) reports and can act upon containment information.

References: https://docs.microsoft.com/en-us/sql/relational-databases/databases/contained-databases

QUESTION 79

You plan to design an application that temporarily stores data in a SQL Azure database.

You need to identify which types of database objects can be used to store data for the application. The solution must ensure that the application can make changes to the schema of a temporary object during a session.

Which type of objects should you identify?

- A. Common table expressions (CTEs)
- B. Table variables
- C. Temporary tables
- D. Temporary stored procedures

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

Explanation:

There are two types of temporary tables: local and global. Local temporary tables are visible only to their creators during the same connection to an instance of SQL Server as when the tables were first created or referenced. Local temporary tables are deleted after the user disconnects from the instance of SQL Server. Global temporary tables are visible to any user and any connection after they are created, and are deleted when all users that are referencing the table disconnect from the instance of SQL Server.

References: https://technet.microsoft.com/en-us/library/ms186986(v=sql.105).aspx

QUESTION 80

You have a SQL Server 2012 instance that hosts a single-user database. The database does not contain user-created stored procedures or user-created functions. You need to minimize the amount of memory used for query plan caching.

Which advanced server option should you modify?

- A. Enable Contained Databases
- B. Allow Triggers to Fire Others
- C. Optimize for Ad hoc Workloads
- D. Scan for Startup Procs

Correct Answer: C Section: [none] Explanation

Explanation/Reference:

Explanation:

The optimize for ad hoc workloads option is used to improve the efficiency of the plan cache for workloads that contain many single use ad hoc batches. When this option is set to 1, the Database Engine stores a small compiled plan stub in the plan cache when a batch is compiled for the first time, instead of the full compiled plan. This helps to relieve memory pressure by not allowing the plan cache to become filled with compiled plans that are not reused.

References: https://docs.microsoft.com/en-us/sgl/database-engine/configure-windows/optimize-for-ad-hoc-workloads-server-configuration-option

QUESTION 81

You have a SQL Server 2012 database named DB1. You have a backup device named Device1.

You discover that the log file for the database is full. You need to ensure that DB1 can complete transactions. The solution must not affect the chain of log sequence numbers (LSNs).

Which code segment should you execute?

- A. BACKUP LCG DB1 TO Device1 WITH COPY_ONLY
- B. BACKUP LOG DB1 TO Device1
- C. BACKUP LOG DB1 TO Device1 WITH NCRECCVERY
- D. BACKUP LOG D31 TO Device1 WITH TRUNCATE ONLY

Correct Answer: B Section: [none] Explanation

Explanation/Reference:

Explanation:

The transaction log LSN chain is not affected by a full or differential database backup.

References: https://www.mssqltips.com/sqlservertip/3209/understanding-sql-server-log-sequence-numbers-for-backups/

