

**Q1.**

**A company has an API to manage purchase orders, with each record identified by a unique purchase order ID. The API was built with RAML according to MuleSoft best practices.**

**What URI should a web client use to request order P05555?**

- ☐ A/orders/{P05555}
- ☐ B/orders/order=P05555
- ☐ C/orders?order=P05555
- ☐ D/orders/P05555

Ans : A

**Q2.**

**A Database On Table Row listener retrieves data from a CUSTOMER table that contains a primary key userjd column and an increasing kxjin\_date\_time column. Neither column allows duplicate values.**

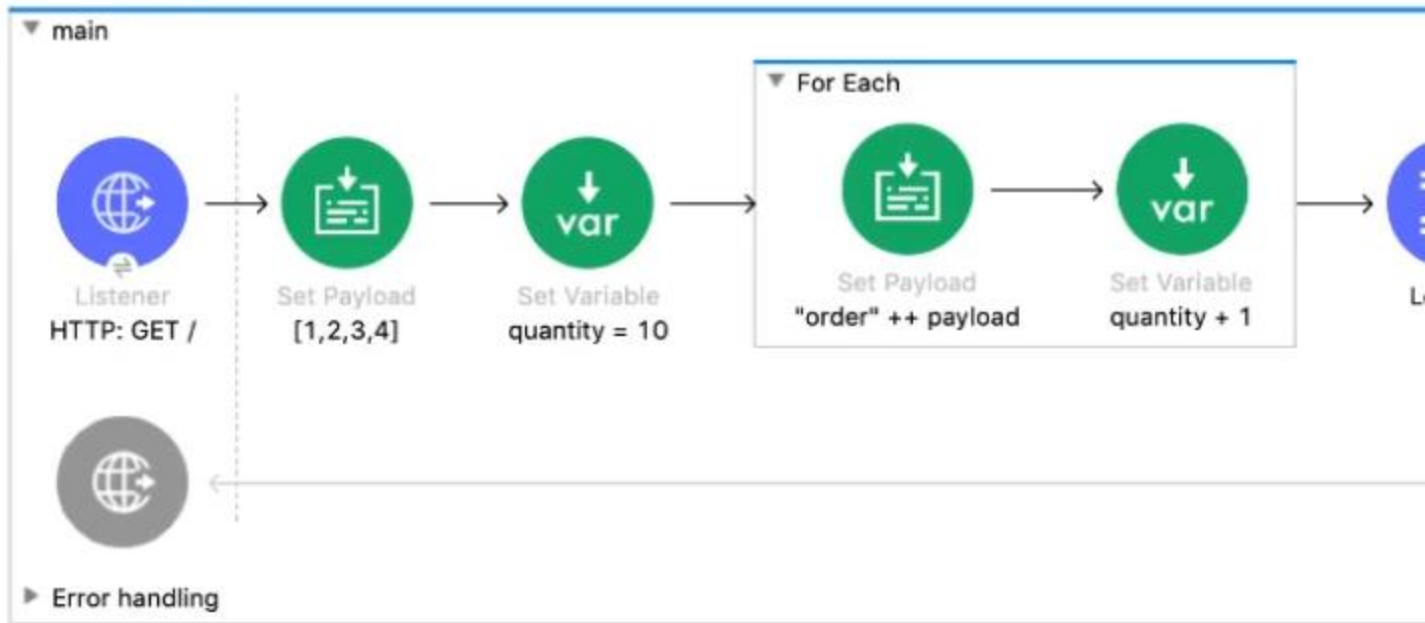
**How should the listener be configured so it retrieves each row at most one time?**

- ☐ A Set the watermark column to the bgin\_date\_time column
- ☐ B Set the target value to the last retrieved login\_date\_time value
- ☐ C Set the target value to the last retrieved user\_jd value
- ☐ D Set the watermark column to the user\_Id column

Ans : B

**Q3.**

**Refer to the exhibits.**



```

<flow name="main" >
  <http:listener doc:name="HTTP: GET /" config-ref="HTTP_Listener_config" path="/" allowedMethod="GET" />
  <set-payload value="#[[1,2,3,4]]" doc:name="[1,2,3,4]" />
  <set-variable value='10' doc:name="quantity = 10" variableName="quantity" />
  <foreach doc:name="For Each" >
    <set-payload value='#["order" ++ payload]' doc:name='"order" ++ payload' />
    <set-variable value="#[vars.quantity + 1]" doc:name="quantity + 1" variableName="quantity" />
  </foreach>
  <logger level="INFO" doc:name="Logger" message='#[[ payload, vars.quantity ]]' />
</flow>

```

What payload and quantity are logged at the end of the main flow?

- ☐ A[[1,2,3,4], 14]
- ☐ B[[order1, order2, order3, order4], 14]
- ☐ C[[1,2,3,4], 10]
- ☐ D[order1order2order3order4,14]

Ans :B

Q4.

A Mule project contains a DataWeave module called MyModule.dwl that defines a function named formatString. The module is located in the project's src/main/resources/modules folder.

What is the correct way in DataWeave code to import MyModule using a wildcard and then call the module's formatString function?

A)

```
%dw 2.0
output application/json
import * from modules.MyModule
---
MyModule.formatString( "annie point" )
```

B)

```
%dw 2.0
output application/json
import * from modules::MyModule
---
MyModule::formatString( "annie point" )
```

C)

```
%dw 2.0
output application/json
import * from modules.MyModule
---
formatString( "annie point" )
```

D)

```
%dw 2.0
output application/json
import * from modules::MyModule
---
formatString( "annie point" )
```

☐ AOption A

☐ BOption B

☐ COption C

☐ DOption D

Ans :c

Q5.

Refer to the exhibits.



```

1@%dw 2.0
2 output application/
3 ---
4@order: {
5@   item: {
6@     itemName: p
7@     itemType: p
8@     price: payl
9@   }
10 }

```

The Set Payload transformer In the addItem subflow uses DataWeave to create an order object.

What is the correct DataWeave code for the Set Payload transformer in the createOrder flow to use the addItem subflow to add a router cable with the price of 100 to the order?

- ☐ A addItemf { payload: { price: '100', item: 'router', itemType: 'cable' } > )
- ☐ B lookupf 'addItem', { payload: { price: '100', item: 'router', itemType: 'cable' } } )
- ☐ C addItemf { price: '100', item: 'router', itemType: 'cable' } )
- ☐ D lookupf 'addItem', { price: '100', item: 'router', itemType: 'cable' } )

ANS : b

What condition requires using a CloudHub Dedicated Load Balancer?

- ☐ A When cross-region load balancing is required between separate deployments of the same Mule application
- ☐ B When custom DNS names are required for API implementations deployed to customer-hosted Mule runtimes
- ☐ C When API invocations across multiple CloudHub workers must be load balanced

☐ **D**When server-side load-balanced TLS mutual authentication is required between API implementations and API clients

Ans :B

### Question 2

When designing an upstream API and its implementation, the development team has been advised to not set timeouts when invoking downstream API. Because the downstream API has no SLA that can be relied upon. This is the only downstream API dependency of that upstream API. Assume the downstream API runs uninterrupted without crashing. What is the impact of this advice?

☐ **A**The invocation of the downstream API will run to completion without timing out.

☐ **B**An SLA for the upstream API CANNOT be provided.

☐ **C**A default timeout of 500 ms will automatically be applied by the Mule runtime in which the upstream API implementation executes.

☐ **D**A load-dependent timeout of less than 1000 ms will be applied by the Mule runtime in which the downstream API implementation executes.

Answ

### Question 3

An API has been updated in Anypoint Exchange by its API producer from version 3.1.1 to 3.2.0 following accepted semantic versioning practices and the changes have been communicated via the API's public portal. The API endpoint does NOT change in the new version. How should the developer of an API client respond to this change?

☐ **A**The update should be identified as a project risk and full regression testing of the functionality that uses this API should be run.

- ☐ **B**The API producer should be contacted to understand the change to existing functionality.
- ☐ **C**The API producer should be requested to run the old version in parallel with the new one.
- ☐ **D**The API client code **ONLY** needs to be changed if it needs to take advantage of new features.

#### Question 4

A new upstream API is being designed to offer an SLA of 500 ms median and 800 ms maximum (99th percentile) response time. The corresponding API implementation needs to sequentially invoke 3 downstream APIs of very similar complexity. The first of these downstream APIs offers the following SLA for its response time: median: 100 ms, 80th percentile: 500 ms, 95th percentile: 1000 ms. If possible, how can a timeout be set in the upstream API for the invocation of the first downstream API to meet the new upstream API's desired SLA?

- ☐ **A**Set a timeout of 100 ms; that leaves 400 ms for the other two downstream APIs to complete
- ☐ **B**Do not set a timeout; the invocation of this API is mandatory and so we must wait until it responds
- ☐ **C**Set a timeout of 50 ms; this times out more invocations of that API but gives additional room for retries
- ☐ **D**No timeout is possible to meet the upstream API's desired SLA; a different SLA must be negotiated with the first downstream API or invoke an alternative API

Ans : D

### Question 5

An organization has several APIs that accept JSON data over HTTP POST. The APIs are all publicly available and are associated with several mobile applications and web applications. The organization does NOT want to use any authentication or compliance policies for these APIs, but at the same time, is worried that some bad actor could send payloads that could somehow compromise the applications or servers running the API implementations. What out-of-the-box Anypoint Platform policy can address exposure to this threat?

- ☐ **A** Apply a Header injection and removal policy that detects the malicious data before it is used
  - ☐ **B** Apply an IP blacklist policy to all APIs; the blacklist will include all bad actors
  - ☐ **C** Shut out bad actors by using HTTPS mutual authentication for all API invocations
  - ☐ **D** Apply a JSON threat protection policy to all APIs to detect potential threat vectors
- ans : B

### Question 6

An organization is implementing a Quote of the Day API that caches today's quote. What scenario can use the CloudHub Object Store connector to persist the cache's state?

- ☐ **A** When there is one deployment of the API implementation to CloudHub and another one to customer hosted mule runtime that must share the cache state.
- ☐ **B** When there are two CloudHub deployments of the API implementation by two Anypoint Platform business groups to the same CloudHub region that must share the cache state.

- ☐ **C**When there is one CloudHub deployment of the API implementation to three workers that must share the cache state.
- ☐ **D**When there are three CloudHub deployments of the API implementation to three separate CloudHub regions that must share the cache state.

Answer :A

### Question 7

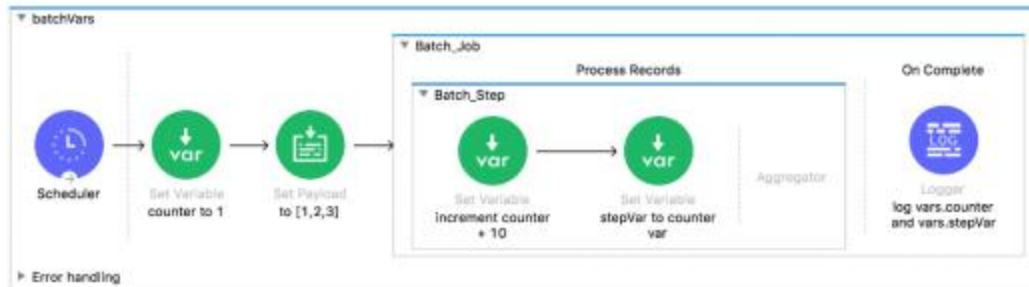
An organization is evaluating using the CloudHub shared Load Balancer (SLB) vs creating a CloudHub dedicated load balancer (DLB). They are evaluating how this choice affects the various types of certificates used by CloudHub deployed Mule applications, including MuleSoft-provided, customer-provided, or Mule application-provided certificates. What type of restrictions exist on the types of certificates for the service that can be exposed by the CloudHub Shared Load Balancer (SLB) to external web clients over the public internet?

- ☐ **A**Underlying Mule applications need to implement own certificates
- ☐ **B**Only MuleSoft provided certificates can be used for server side certificate
- ☐ **C**Only self signed certificates can be used
- ☐ **D**All certificates which can be used in shared load balancer need to get approved by raising support ticket

Ans : B

Refer to the exhibit. What are the values of the counter and stepVar variables in the On Complete phase?





☐ Counter: 31, stepVar: 31

☐ Counter: 1, stepVar: 31

☐ Counter: 31, stepVar: null

☐

Counter: 1, stepVar: null

Ans : C

What MuleSoft product enables publishing, sharing, and searching of APIs?

☐ API Designer

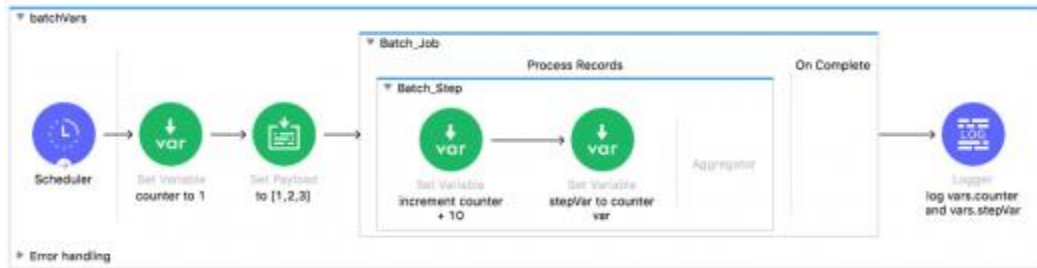
☐ API MUnit

☐ Anypoint Exchange

☐ API Notebook

ANS : C

Refer to the exhibit. What are the values of the counter and stepVar variables after the Batch Job?



☐ Counter: 31, stepVar: 31

☐ Counter: 1, stepVar: 31

☐ Counter: 1, stepVar: null

☐ Counter: 31, stepVar: null

Ans : D

A Batch Job scope has three batch steps. An event processor in the second batch step throws an error because the input data is incomplete. What is the default behavior of the batch job after the error is thrown?

☐ Event processing continues to the third batch step

☐ All processing of the batch job stops

☐ The second batch step is retried

☐ The first batch step is retried

Ans : b

Refer to the exhibits. What is the output of the Logger component in the Batch Job?



```
<flow name="main" >
  <scheduler doc:name="Scheduler" >
    <scheduling-strategy><fixed-frequency frequency="10000"/></scheduling-strategy>
  </scheduler>
  <set-payload value="#[1,2,3,4]" doc:name="[1,2,3,4]" />
  <batch:job jobName="processRecordsBatchJob" >
    <batch:process-records >
      <batch:step name="Batch_Step_With_Filter" acceptExpression="#[(payload mod 2) != 0]" >
        <ee:transform doc:name="Divide by 3" >
          <ee:message><ee:set-payload><![CDATA[${div 2.0
            output application/java
            ==
            payload / 3}]]></ee:set-payload>
          </ee:message>
        </ee:transform>
        <batch:aggregator doc:name="Batch_Aggregate_1" size="1">
          <logger level="INFO" doc:name="payload" message="#[payload]"/>
        </batch:aggregator>
      </batch:step>
    </batch:process-records>
  </batch:job>
</flow>
```

☐

[.333]

[1]

☐

[.333, 1]

☐

[.333, .667, 1, 1.333]

☐

[.333]

[.667]

[1]

[1.333]

In a RAML specification, what attribute defines a query parameter to be optional for a resource?

☐

Required: false

☐

Optional: true

☐

Provided: false

☐

Mandatory false

What is NOT part of a Mule 3 message?

☐

Payload

☐

InboundProperties

☐

OutbountProperties

☐

Variables

☐

Attachments

Answer : C

What out-of-the-box policy can safeguard against Denial of Service type attacks?

☐

Rate limiting

☐

Throttling

☐

Cross-origin resource sharing

☐

LDAP security manager

Ans:D

A Mule application properties file named training-DEVproperties has been defined. How is the properties file referenced in the Mule application?

☐

In an attribute in the main mule element

☐

In a Property Placeholder element

☐

As a -M-D placeholder when starting the Mule runtime

☐

In an attribute in the HTTP Listener element

Answer: D

What port number is used to expose the domain URL of a Mule application deployed to CloudHub?

☐

8081

☐  
81

☐  
80

☐  
8080

Answer : A

What message processor can set the HTTP response status code to 200?

☐  
Variable

☐  
Set Payload

☐  
Property

☐  
Record Variable

☐  
Attachment

Answer : B

What property of a Mule message is immutable?

☐  
Attachments

☐  
OutboundProperties

☐  
Session Variables

☐  
Payload

☐  
InboundProperties

☐  
Flow Variables

Answer : A

A Mule application has two flows named parentFlow and childFlow. A variable is defined in parentFlow. What is true for a Mule subflow?

☐

It can have its own exception strategy

☐

It is executed synchronously

☐

An external client can send messages directly to it

☐

It must be in the same configuration file as the parent flow

Answer : A

What is the default processing strategy of a one-way flow?

☐

Queued-asynchronous

☐

Synchronous

☐

Non-blocking

☐

Thread-per-processor

☐

Queued-thread-per-processor

Answer : C

What is required for two Mule applications to share data using a VM connector component?

☐

Put the Mule applications in the same Anypoint Platform environment

☐

Put the Mule applications in the same Anypoint Platform business group

☐

Put the Mule applications in the same non-default Mule domain

☐

Put the Mule applications in the same default Mule domain

Answer : B

How are outbound properties automatically passed to an outbound REST request using an HTTP Request component?



As headers



As query parameters



As URI parameters



In the message payload



As attachments



As flow variables

Answer : B

A WSDL defines a conversionRate operation with an input message that requires two parts: fromCurrency and toCurrency. How are fromCurrency and toCurrency set in the flow in order to call the conversionRate operation using a Web Service Consumer component?



In two flow variables



As outbound properties



As inbound properties



In the message payload



As attachments

Answer : c

What is NOT a way to pass data to a RESTful web service in a flow using an outbound HTTP Request component?



Set URI parameters in the HTTP Request component



Set inbound properties before the HTTP Request component



Set query parameters in the HTTP Request component



Set outbound properties before the HTTP Request component

What asset can NOT be created using Anypoint Platform Design Center?



API Specifications



Mule Applications



API Fragments



API portals

An exception is caught by a choice exception strategy. How is the exception routed?



To all exceptions whose conditions evaluate to true



To the first exception strategy whose condition evaluates to true



To the first exception strategy whose condition evaluates to true and to the default exception strategy



To the first exception strategy whose condition evaluates to true and to the global exception strategy

How is a default exception strategy set in a Mule application?





In a configuration global element in any Mule configuration XML file



In the mule-app.properties file



As an attribute of one or more flow configuration elements in one or more Mule configuration XML files



As an attribute of a global exception strategy



As a JVM system environment variable

A Payload filter is configured to test for type `java.lang.String`. What happens when the filter is passed a message with the payload null?



The Mule application stops



The message is replayed from the start of the flow



The message is passed to subsequent message processors



All subsequent message processors are skipped

What module and operation will throw an exception if a Mule event's payload is not a number?



Validation module's `Is number` operation



Validation module's `Is not number` operation



Filter's module's `Is number` operation



Filter's module's `Is not number` operation

A Mule flow has a JMS queue listener as the message source. Where can the next message processor access a JMS messages header?



Outbound property



Inbound property



Payload



Attachment



Flow variable

What part of a Mule flow can contain a Poll scope?



Async scope



Message source



For Each scope



Message Enricher scope

How is a Poll scope's watermark accessed from a message processor in a flow?



In a session variable



In an outbound property



In an inbound property



In a flow variable



In a header

A File connector configured to read files from a /mule/input directory. All other File connector settings are the default settings. What happens to a file after it is processed by the File connector?

☐

The file is moved to /mule/output

☐

The file is deleted from the input directory, but is not moved anywhere

☐

The file is moved to /tmp

☐

The file stays in the input directory

What phase of a batch job using a Batch scope must contain at least one message processor?

☐

Input

☐

Load and Dispatch

☐

Process Records

☐

On Complete

A message payload is modified using a Message Enricher scope with an empty target. What is true about the message payload that leaves the Message Enricher scope?

☐

The payload is changed to the modified payload

☐

The modified payload is stored in a flow variable

☐

The modified payload is stored as an inbound property

☐

The payload returns to the original payload



The modified payload is stored as an outbound property

A Batch scope has three batch steps. A message processor in the second batch step throws an exception because the input data is incomplete. What is the default behavior after the exception is thrown?



Continues to the third batch step



Stops processing the entire batch job



Retries the second batch step



Retries the first batch step

What is the purpose of the api:router element in APIkit?



Routes requests to API implementations, but does not validate them against RAML API specifications



Routes responses to the caller, but does not validate them against RAML API specifications



Validates requests against RAML API specifications and routes them to API implementations



Validates responses returned from API requests and routes them to the caller

What is the scope of a record variable in a Batch scope?



In a single batch step, but not in the other batch steps



In all batch steps, but not in the On Complete phase



In the message source, each batch step, and the On Complete phase

☐

In all batch steps, and the On Complete phase

A web client submits a GET request to a Mule 4 application to the endpoint /customers?id=48493. Where is the id stored in the Mule event by the HTTP Listener?

☐

Inbound properties

☐

Variables

☐

Attributes

☐

Payload

Assume that a database table contains a record ID column that always increases as new records get added to the table. In a Mule application, what is the key process to enable manual watermarking for requests to a database using the Scheduler endpoint and the Database SELECT operation?

☐

Save the max recordID from the set of recordIDs in an ObjectStore and reference this record in subsequent database requests

☐

Enable automatic watermarking in the Database SELECT operation

☐

Set the Watermark column in the Scheduler endpoint to the recordID

☐

Save the max recordID from the set of recordIDs in a variable and reference this variable in subsequent database request

How is the success of a Center for enablement measured?

☐

Measured on policies in place

☐

Measured on asset consumption

☐

Measured on accessibility of assets



Measured on number of assets available

1. What are four ways APIs provide the info for how to communicate with a software component? (Select 4... lol)



Operations (what to call)



Inputs (what to send with a call)



Outputs (what you get back from a call)



Underlying data types

Submit My Answer

This defines what you can call, what you send it, and what you get back:



API Specification



API Proxy



Web Service

An API has been created in Design Center. What is the next step to make the API discoverable?



Deploy the API to a Maven repository



Enable autodiscovery in API Manager



Publish the API from inside flow designert



Publish the API to Anypoint Exchange

What is an application that controls access to a web service, restricting access and usage with an API gateway?

☐

API Specification

☐

API Proxy

☐

Web Service

What is the actual implementation you can make calls to or the interface of that API implementation?

☐

API Specification

☐

API Proxy

☐

Web Service

How are SOAP web services defined?

☐

In an XML-based WSDL (Web Services Description Language) file

☐

DUH

In what file does the Mule project keep track of all of its dependencies?

☐

Mule-artifact.json

☐

Pom.xml

☐

Mule-app.properties

☐

Global.xml

What do RESTful web services use?

☐

Existing HTTP communication protocol

☐

DUH

What is the minimum required configuration in a flow for a Mule application to compile?

☐

An event processor/A message processor in the Process section of a flow

☐

An event/message processor in the Source section of a flow

☐

An empty flow

☐

A message processor in both the Source and Process sections of a flow

What can ONLY be done with VM connectors, and NOT with Flow References, in a single Mule application?

☐

Preserve variables as the Mule event gets passed to another flow

☐

Allow a flow to pass events to another flow synchronously

☐

Preserve the original payload when the VM connector returns a response from a flow

☐

Allow a flow to pass events to another flow asynchronously

Which RESTful web service request method partially updates a resource?

☐

GET

☐

POST

☐

DELETE

☐

PUT

☐



PATCH

Which RESTful web service request method creates a new resource?

☐

GET

☐

POST

☐

DELETE

☐

PUT

☐

PATCH

An inbound Database connector is configured to select rows from a MySQL database. What is the format of results returned from the database query?

☐

Java

☐

JSON

☐

XML

☐

CSV

Which RESTful web service request method deletes a resource?

☐

GET

☐

POST

☐

DELETE

☐

PUT

☐

PATCH

What is NOT part of a Mule 4 event?

☐

Message

☐

Payload

☐

InboundProperties

☐

Attributes

What file type is required to configure a Web Service Consumer to consume a SOAP web service?

☐

RAML

☐

WSDL

☐

JSON

☐

OAS

How does APIkit determine the number of flows to generate from a RAML specification?

☐

Creates a separate flow for each HTTP method

☐

Creates a separate flow for each resource

☐

Creates a separate flow for each resource that contains child resources

☐

Creates one flow for the entire API spec

☐

Creates a separate flow for each response status code

How are query parameters dynamically passed to an outbound REST request using an HTTP Request operation?

☐

As query parameters in the HTTP Request operation

☐

As URI parameters in the HTTP Request operation

☐

In the Mule's event's payload

☐

As flow variables

☐

As attributes in a Transform Message component before the HTTP Request operation

☐

As attributes in the HTTP Listener operation

What is the purpose of API autodiscovery?

☐

Enables API Manager to discover the published API on Anypoint Exchange

☐

Allows the Mule application to be automatically discovered on Anypoint Exchange

☐

Enables the API to be directly manage in API Manager

☐

Allows a deployed Mule application to connect with API Manager to download policies and act as its own API proxy

1. Refer to the exhibit:

*##RAML 1.0 title: ACME Medical API*

*baseUri: https://dev.acme.com/api /patients: GET: queryParameters: year: type: integer example: 2017* What is the correct URL to perform a GET request to /patients?

☐

Http://dev.acme.com/patients?year=2016

☐

Http://dev.acme.com/api/patients

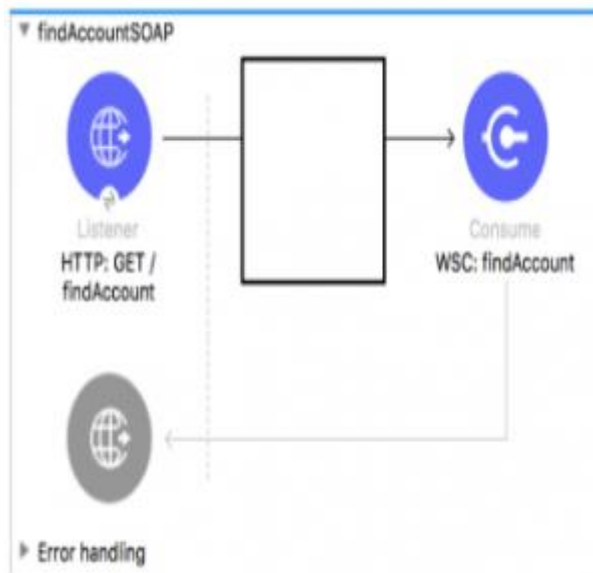
☐

Http://dev.acme.com/patients

☐

Http://dev.acme.com/api/patients?year=2016

Refer to the exhibit. The flow calls a SOAP endpoint using the Consume operation of the Web Service Consumer. The SOAP service has a required input parameter. What event processor can be used to build the SOAP envelope with the required argument to pass to the SOAP service?



☐

Set Property

☐

Build SOAP

☐

Transform Message

☐

JSON to XML

☐

Set Attachment

Which RESTful web service request method retrieves the current state of a resource in some representation (usually JSON or XML)

☐

GET

☐

POST

☐

DELETE

☐

PUT

☐

PATCH

Which RESTful web service request method replaces a resource completely? (If the resource doesn't exist a new one is created)

☐

GET

☐

POST

☐

DELETE

☐

PUT

☐

PATCH

A RAML example fragment named BankAccountsExample.raml is placed in the examples folder in an API specification project.

What is the correct syntax to reference the fragment?

☐

Example: !include BankAccountsExample.raml

☐

Example: #import BankAccountsExample.raml

☐

Example: !include examples/BankAccountsExample.raml

☐

Example: #import examples/BankAccountsExample.raml

What are four benefits of API portals? (Choose 4)

☐

Documentation and examples

☐

Way to register applications and get access to the API

☐

Way to provide feedback and make requests

☐

Way to test the API by making calls to it

Submit My Answer

What is the maximum number of Mule applications that can run in a Cloud Hub Worker?

☐

At most one

☐

At least one

☐

Depends on the vCores

☐

Depends on the number of CloudHub workers configured

What takes data and devices connected with APIs to make them pluggable and to create reusable services?

☐

Application network

☐

DUH

What is a method of communication that allows two software systems to exchange data over the internet?

☐

Web Service

☐

DUH

What does an API proxy application NOT do?

☐

Determine which request Mule event is allowed to pass through to the API backend service

☐

Apply runtime policies to enforce governance

☐

Determine which response Mule event is allowed to pass through to the API backend service

☐

Measure the traffic flowing through the proxy

An HTTP Request operation returns a JSON array of objects. In the Transform Message component, what is the process to convert the array of objects to an array of custom Java Account objects?

☐

Add the Account object metadata to the output and use the drag-and-drop feature to transform the incoming JSON data

☐

Change the output type to the Java Account object type

☐

Add the Account object metadata to the input and the Transform Message component will automatically convert the JSON objects to Account objects

☐

Change the input type to the Java Account object type

What provides info for how to communicate with a software component?

☐

API

☐

DUH

What do RESTful web services use?



Standard HTTP protocol



DUH

When a REST API is added to the exchange, what is automatically created for it?



API Portal



DUH

What are three things an API portal has? (Choose 3)



Auto-generated API documentation



API console



Auto-generated API endpoint that uses a mocking service

Submit My Answer

Refer to the exhibit: 1 *##RAML 1.0* 2 *title: American Flights API* 3 *version: 10 4 5* 4 */flights:* 5 6 *get:* 7 8 *{flight\_id}:* 9 10 *get:* There is an error in the flight\_id resource's GET method. What needs to be done to fix the problem?



Remove blank line on row 9



Enclose flight\_id with parenthesis () instead of curly braces {}



Indent the get method under the {flight\_id} resource



Outdent the {flight\_id} resource



Remove the curly braces {} around flight\_id



What is the process to create a connector using REST Connect?



Develop the API in flow designer and publish the API to Exchange



Design the API in Anypoint Studio and upload the API to Runtime Manager



Design the API In Design Center and publish the API to Exchange



Develop the API in Anypoint Studio and export the connector as a jar file

When is a connector automatically created?



When a RAML 1.0 API specification is added to the exchange



DUH

What application is used for building integration apps that connect systems and consume APIs?



API designer



Anypoint Studio



Flow Designer

How are multiple conditions used in a Choice router to route events?



To find the FIRST true condition, then route the same event to the matched route and ALL FOLLOWING routes



To route the same event to the matched route of EVERY true condition



To find the FIRST true condition, then distribute the event to the ONE matched route



To filter and aggregate the responses after copying the event to EVERY route

Refer to the exhibit. This RAML specification includes an XML example that matches the Records data type defined in another RAML file named recordsDataType.raml. Using the Records type, how can this XML example be represented in RAML?

```
##RAML 1.0
title: Records API

/records:
  get:
    responses:
      200:
        body:
          application/xml:
            example: |
              <music>
                <collection>Deep Collection</collection>
                <artists>
                  <artist1>Deep Purple</artist1>
                  <artist2>Rainbow</artist2>
                </artists>
              </music>
```

☐

Option 1

```
##RAML 1.0
title: Records API

types:
  Records: !include recordsDataType.raml

/records:
  get:
    responses:
      200:
        body:
          application/xml:
            type: Records
            example:
              music:
                collection: "Deep Collection "
                artists:
                  - artist1: "Deep Purple"
                  - artist2: "Rainbow"
```

○

## Option 2

```
##RAML 1.0
title: Records API

types:
  Records: !include recordsDataType.raml

/records:
  get:
    responses:
      200:
        body:
          application/xml:
            type: Records
            example:
              music:
                collection: "Deep Collection "
                artists:
                  "Deep Purple"
                  "Rainbow"
```

○

## Option 3

```
##RAML 1.0
title: Records API

types:
  Records: !include recordsDataType.raml

/records:
  get:
    responses:
      200:
        body:
          application/xml:
            type: Records
            example:
              music:
                collection: "Deep Collection "
                artists: "Deep Purple", "Rainbow"
```

○

## Option 4

```
##RAML 1.0
title: Records API

types:
  Records: !include recordsDataType.raml

/records:
  get:
    responses:
      200:
        body:
          application/xml:
            type: Records
            example:
              music:
                collection: "Deep Collection "
                artists:
                  artist1: "Deep Purple"
                  artist2: "Rainbow"
```

What application is used for implementing APIs and building integration applications?

☐

Anypoint Studio

☐

API designer

☐

Flow Designer

What application is used for designing, documenting, and mocking APIs?

☐

Flow Designer

☐

API designer

☐

Anypoint Studio

What is the language Mule uses to access, query, and transform event data?

☐

DataWeave 2.0

☐

DUH

What does the Mule runtime use to enforce policies and limit access to APIs?



Anypoint Access Control



The proxy created by API Manager



API Manager



The Mule runtime's embedded API Gateway

API Manager has been configured to enforce an SLA policy and the RAML spec has been updated with the required client\_id and client\_secret header requirements. The new RAML spec has been published to Anypoint Exchange. What is the next step to gain access to the API?



POST a JSON object to the /api/register endpoint of the API proxy



Request access to the API in Anypoint Exchange



Email the organization administrators to request access to the API



Add a client application to the Anypoint Platform organization

What happens to the attributes of a Mule event in a flow after an outbound HTTP Request is made?



New attributes may be added from the HTTP response headers, but no headers are ever removed



New attributes may be added from the HTTP response, but previous attributes are passed through unchanged



Attributes do not change

☐

Attributes are replaced with new attributes from the HTTP Request response (which might be null)

A Scatter-Gather processes three separate HTTP requests. Each request returns a Mule event with a JSON payload. What is the final output of the Scatter-Gather?

☐

An Object containing all three Mule event Objects

☐

An array of three JSON payload Objects

☐

An array of the three Mule event Objects

☐

An Object containing all three JSON payload Objects

☐

The last JSON payload Object

☐

The last Mule event object

An event contains a payload that is an array of Objects. How is the event routed in a Scatter-Gather?

☐

The ENTIRE event is sent to each route and processed SEQUENTIALLY

☐

The event is SPLIT and different SMALLER events are routed and processed in PARALLEL

☐

The event is SPLIT and different SMALLER events are routed and processed SEQUENTIALLY

☐

The ENTIRE event is sent to each route and processed in PARALLEL

A Set Variable component saves the current payload to a variable with the name images. What is the DataWeave expression to access the images variable?

☐

☐ #[payload.images]

☐ #[images]

☐ #[flowVars.images]

☐ #[vars.images] (vars is a DataWeave predefined variable)

What module and operation will throw an error if a Mule event's payload is not a number?

☐ Validation module's Is number operation

☐ Validation module's Is not number operation

☐ Filter module's Is number operation

☐ Filter module's Is not number operation

A web service implements an API to handle requests to `https://acme.com/customers/{state}`. A web client makes a request to this API implementation at `https://acme.com/customers/CA`. What is the correct DataWeave expression to retrieve the value CA?

☐ #[message.payload.inboundProperties.'http.query.params'.state]

☐ #[message.inboundProperties.'http.uri.params'.state]

☐ #[attributes.uriParams.state]

☐ #[attributes.'http.uri.params'.state]

☐ #[state]

Refer to the exhibits. What happens to this flow when the Validation module's Is not null operation throws an error?



```
<http:listener-config name="HTTP_Listener_config" doc:name="HTTP Listener config">
  <http:listener-connection host="0.0.0.0" port="8081" />
</http:listener-config>
<flow name="main">
  <http:listener doc:name="HTTP: GET /test" config-ref="HTTP_Listener_config" path="/test"/>
  <set-payload value="#[null]" doc:name="null" />
  <validation:is-not-null doc:name="payload" value="#[payload]" message="The payload is null!"/>
</flow>
```

- ☐ The flow silently stops processing its Mule event
- ☐ The flow stops processing its Mule event and returns an error message to the HTTP Listener operation
- ☐ The flow logs the error message in the console and continues processing its Mule event
- ☐ The flow continues processing its Mule event and appends the error message to the end of the payload

A flow contains an HTTP Listener as the event source. What is the DataWeave expression to log the Content-Type header using a Logger component?

- ☐ `#[["Content-Type: " ++ attributes.headers.'content-type']`
- ☐ `#[["Content-Type: " + headers.'content-type']`
- ☐ `#[["Content-Type: " + attributes.headers.'content-type']`
- ☐ `#[["Content-Type: " ++ headers.'content-type']`



Refer to the exhibit. What is the correct DataWeave expression for accessing the city Cleveland from the JSON payload?

```
[
  {
    "orderId": 592,
    "shipping": "international",
    "city": "Tokyo",
    "account": 4829284911,
    "price": 24.99
  },
  {
    "orderId": 972,
    "shipping": "domestic",
    "city": "Cleveland",
    "account": 829118144,
    "price": 49.99
  },
  {
    "orderId": 396,
    "shipping": "international",
    "city": "Berlin",
    "account": 114800833,
    "price": 24.99
  }
]
```

☐ #[payload[2].city]

☐ #[payload[1].city]

☐ #[payload.city[1]]

☐ #[payload.city[2]]

What is NOT part of a Mule 4 event?

☐ Message

☐ OutboundProperties

☐ Attributes

☐ Variables

☐

Payload

Refer to the exhibits. The main flow has an On Error Continue scope. In the Configuration global element, default error handler is set to globalErrorHandler. A web client makes an HTTP GET request to the flow's HTTP Listener. The Is number validator then throws an error with message "Validate - Payload is an Integer". What response message is returned to the web client?



☐

Error - main flow

☐

Success - Begin main flow

☐

Success - End main flow

☐

Validate - Payload is an Integer

☐

Global Error Handler

A Mule application has two flows named parentFlow and childFlow. The childFlow begins with an HTTP Listener. A variable is defined in parentFlow, then an HTTP Request is made to childFlow's HTTP Listener with some headers set. What is the scope of the variable and attributes in the parentFlow after childFlow returns a response?

☐

The variable is accessible. All the attributes passed to childFlow are removed or replaced

☐

The variable is NOT accessible. All the attributes passed to childFlow are removed or replaced

☐

The variable is NOT accessible. All the attributes passed to childFlow are preserved

☐

The variable is accessible. All the attributes passed to childFlow are preserved  
Refer to the exhibits. The main flow has an On Error Propagate scope. In the Configuration global element, default error handler is set to globalErrorHandler. A web client makes an HTTP GET request to the flow's HTTP Listener. The Is number validator then throws an error with message "Validate - Payload is an Integer". What response message is returned to the web client?



```
<configuration doc:name="Configuration" defaultErrorHandler-ref="globalErrorHandler" />
<error-handler name="globalErrorHandler" >
  <on-error-continue enableNotification="true" logException="true" doc:name="On Error Continue" >
    <set-payload value="Global Error Handler" doc:name="Global Error Handler" />
  </on-error-continue>
</error-handler>
<http-listener-config name="HTTP Listener Config" doc:name="HTTP Listener Config" >
  <http-listener-connection host="0.0.0.0" port="8081" />
</http-listener-config>
<flow name="main">
  <http-listener doc:name="HTTP GET" config-ref="HTTP Listener Config" path="/" />
  <set-payload value="Success - Begin main flow" doc:name="Success - Begin main flow" />
  <validator is-number numberType="INTEGER" />
  <set-payload value="#payload" />
  <message>Validate - Payload is an Integer</message>
  <set-payload value="Success - End main flow" doc:name="Success - End main flow" />
</error-handler>
<on-error-propagate enableNotification="true" logException="true" doc:name="On Error Propagate" >
  <set-payload value="Error - main flow" doc:name="Error - main flow" />
</on-error-propagate>
</error-handler>
</flow>
```

☐

Error - main flow

☐

Success - Begin main flow

☐

Success - End main flow

☐

Validate - Payload is an Integer

☐

Global Error Handler

A Mule application has a flow named parentFlow. The parentFlow contains an HTTP Request operation at the end of the flow. The parentFlow also contains a Set Variable operation right before the HTTP Request operation. What is the scope of

the variable to the server receiving the HTTP Request from parentFlow?

☐

The variable is accessible in the server but is immutable

☐

The variable is accessible in the server, can be changed, and changes are seen back in parentFlow

☐

The variable is NOT accessible in the server

☐

The variable is accessible in the server, can be changed but changes are not seen back in parentFlow

A Mule application has two flows named parentFlow and childFlow. A variable is defined in parentFlow. What is the scope of the variable when the parentFlow calls childFlow using a Flow Reference?

☐

The flow variable is accessible in childFlow but is immutable

☐

The flow variable is accessible in childFlow, can be changed, and changes are seen back in parentFlow

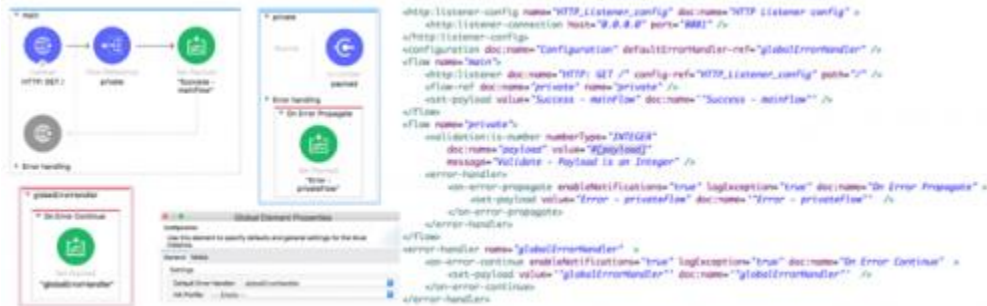
☐

The flow variable is NOT accessible in childFlow

☐

The flow variable is accessible in childFlow, can be changed, but changes are NOT seen back in parentFlow

Refer to the exhibits. The private flow has an On Error Propagate scope. In the Configuration global element, default error handler is set to globalErrorHandler. A web client makes an HTTP GET request to the flow's HTTP Listener. The Is number validator in the private flow then throws an error with message "Validate - Payload is an Integer". What response message is returned to the web client?



GlobalErrorHandler

Success - mainFlow

Error - privateFlow

Validate - Payload is a Number

Refer to the exhibits. The main flow has an On Error Continue scope and the private flow has an On Error Propagate scope. A web client makes an HTTP GET request to the HTTP Listener. The Is number validator in the private flow then throws an error with message "Validate - Payload is an Integer". What response message is returned to the web client?



Error - main flow

Success - main flow

Error - private flow

☐

Success - private flow

☐

Validate - Payload is Integer

Answer : D

How can an error scope be configured to catch all errors in the HTTP namespace?

☐

Type: HTTP

When:

☐

Type: HTTP\*

When:

☐

Type:

When: `#[ error.errorType.namespace == "HTTP" ]`

☐

Type:

When: `#[ contains "HTTP" ]`

Refer to the exhibits. The main flow has an On Error Continue scope with type set to HTTP:NOT\_FOUND. The Mule application configures globalErrorHandler as its default error handler. A web client posts a request to the HTTP Listener. The Transform Message component then throws a MULE:EXPRESSION error trying to convert the payload to application/xml. What response message is returned to the web client?



```

<http:listener-config name="HTTP_Listener_config" doc:name="HTTP Listener config">
  <http:listener-connection host="0.0.0.0" port="8081"/>
</http:listener-config>
<http:listener doc:name="Listener" default-connector-ref="globalErrorHandler"/>
<error-handler name="Global Error Handler">
  <on-error-continue enableDefaultFlow="true" logException="true" doc:name="On Error Continue">
    <on-exception doc:name="Global Error Handler" doc:ref="Global Error Handler"/>
  </on-error-continue>
</error-handler>
<flow name="Test">
  <http:listener doc:name="HTTP" ref="HTTP_Listener_config" path="/">
    <http:listener>
      <on-exception doc:name="MAIN" doc:ref="MAIN"/>
      <on-exception doc:name="RESPONSE" doc:ref="RESPONSE"/>
    </on-exception>
    <set doc:name="Set" value="[[DATA]]" doc:ref="Set 2.8"/>
    <output doc:name="Output" value="[[DATA]]"/>
    </output>
    <on-exception doc:name="HTTP:NOT_FOUND error" doc:ref="HTTP:NOT_FOUND error"/>
  </on-exception>
</flow>

```

○  
"HTTP:NOT\_FOUND error"

○  
"MAIN"

○  
"Global Error Handler"

○  
The MULE:EXPRESSION error's message

What MuleSoft API-led connectivity layer is intended to expose part of a backend database without business logic?

○  
Experience

○  
Data

○  
System

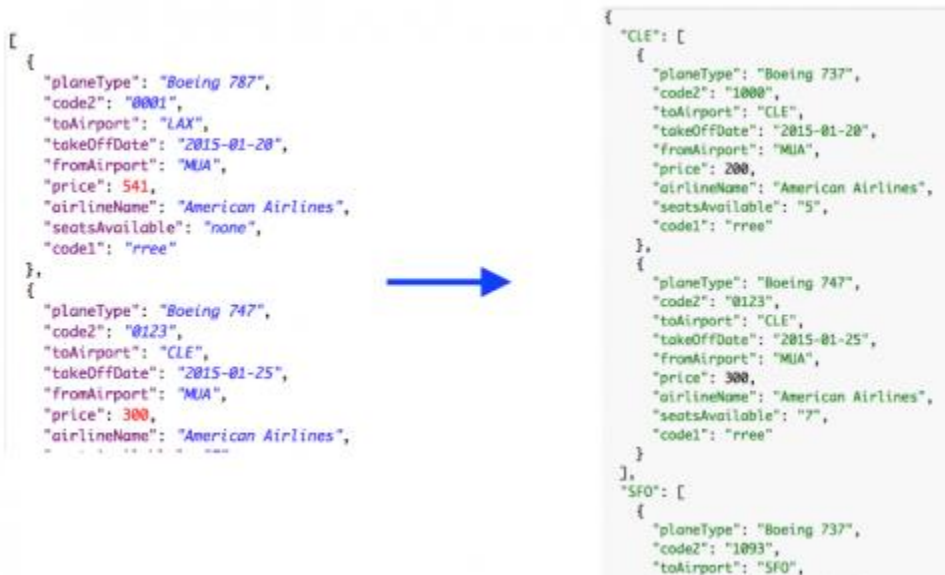
○  
Process

○  
Security

Answer : A

Refer to the exhibit. An event payload contains an unordered array of flight objects, where every object has a price key and a toAirport key. What is valid DataWeave code to return flights

with price under 500, grouped by toAirport in ascending order, with the lowest price first?



- ☐ Payload groupBy \$.toAirport filter \$.price < 500 orderBy \$.price
  - ☐ Payload groupBy \$.toAirport filter \$.price > 500 orderBy \$.price
  - ☐ Payload filter \$.price < 500 orderBy \$.price groupBy \$.toAirport
  - ☐ Payload filter \$.price > 500 orderBy \$.price groupBy \$.toAirport
- Refer to the exhibit. What is valid DataWeave code to transform the input JSON payload to the output XML payload?

Transform Message x Problems Console Mule Debugger

list\_unknown.dwl

```
[
  {
    "employee1": {
      "firstName": "Aanya",
      "lastName": "Anand",
      "details": {
        "dept": "Engineering",
        "region": "APAC"
      }
    },
    {
      "employee2": {
        "firstName": "Bob",
        "lastName": "Brown",
        "details": {
          "dept": "Marketing",
          "region": "USA"
        }
      }
    }
  ]
]
```

Output Payload

```
1 <?xml version='1.0' encoding='UTF-8'?>
2 <employees>
3   <employee firstName="Aanya" lastName="Anand"/>
4 </employees>
```



☐

Option 1

%dw 2.0

output application/xml

----

employees :

  employee

    @{

      firstName: payload[0].employee1.firstName[0],

      lastName: payload[0].employee1.lastName[0]

    } : null

☐

Option 2

%dw 2.0

output application/xml

----

employees :

  employee

    {

      firstName: payload[0].employee1.firstName[0],

      lastName: payload[0].employee1.lastName[0]

    } : ""

☐

Option 3

%dw 2.0

output application/xml

----

employees :

  employee

    @{

      firstName: payload[0].employee1.firstName[0];

      lastName: payload[0].employee1.lastName[0]

    } : null

☐

Option 4

```
%dw 2.0
output application/xml
----
employees :
  employee
  (
    firstName: payload[0].employee1.firstName[0];
    lastName: payload[0].employee1.lastName[0]
  ) : ""
```

Refer to the exhibit. In the deployable archive's /classes folder, there are two properties files named dev.properties and prod.properties. The Mule application fails to deploy to CloudHub through Runtime Manager with the following error message. What could be causing this error?

```
▲ 17:04:02.534 11/30/2017 Worker-0 qtp987274037-33 ERROR
null
java.io.FileNotFoundException: class path resource [{env}.properties] cannot be opened because it does not exist
    at org.springframework.core.io.ClassPathResource.getInputStream(ClassPathResource.java:172)
    at org.springframework.core.io.support.EncodedResource.getInputStream(EncodedResource.java:151)
    at org.springframework.core.io.support.PropertiesLoaderUtils.fillProperties(PropertiesLoaderUtils.java:98)
    at org.springframework.core.io.support.PropertiesLoaderSupport.loadProperties(PropertiesLoaderSupport.java:11)
    at org.springframework.core.io.support.PropertiesLoaderSupport.mergeProperties(PropertiesLoaderSupport.java:11)
    at
```

- ☐ The property files were NOT saved at the root level of the deployable archive
  - ☐ The env property is NOT set in the Runtime Manager in the Mule application's Properties tab
  - ☐ A file named \${env}.properties is NOT included in the deployable archive file
  - ☐ The dev.properties and prod.properties files were NOT uploaded to Runtime Manager
- A Mule application has a main flow and a combineNames flow. In the main flow, a variable named fullName is set to the object {firstName: "Max", lastName: "Mule"}. What is valid DataWeave code to call the combineNames flow with the input object stored in the fullName variable?
- ☐ #[ dw::Flow::lookup( "combineNames", vars.fullName ) ]

☐ `#[ dw::Runtime::lookup( "combineNames", vars.fullName ) ]`

☐ `#[ lookup( "combineNames", vars.fullName ) ]`

☐ `#[ combineNames( vars.fullName ) ]`

☐ `#[ lookup( combineNames( vars.fullName ) ) ]`

What DataWeave 2.0 type can be used as input to a map operation?

☐ Array

☐ Object

☐ Map

☐ String

☐ Key

Answer : A

What is the correct way to format the decimal 20.3844 as a string to two decimal places?

☐ 20.3844 as String {format: ".0#"}

☐ 20.3844 as :string {format: ".0#"}

☐ 20.3844 as String as format: ".0#"

☐ 20.3844 as :string as format: ".0#"

☐ 20.3844 as String (format = ".0#")

☐

20.3844 as :string (format = ".0#")

What reserved property can be defined and used in a Mule application to allow an HTTPS Listener to be accessed by external web clients after the Mule application is deployed to CloudHub?

☐

`${ssl.port}`

☐

`${ssl.listener.port}`

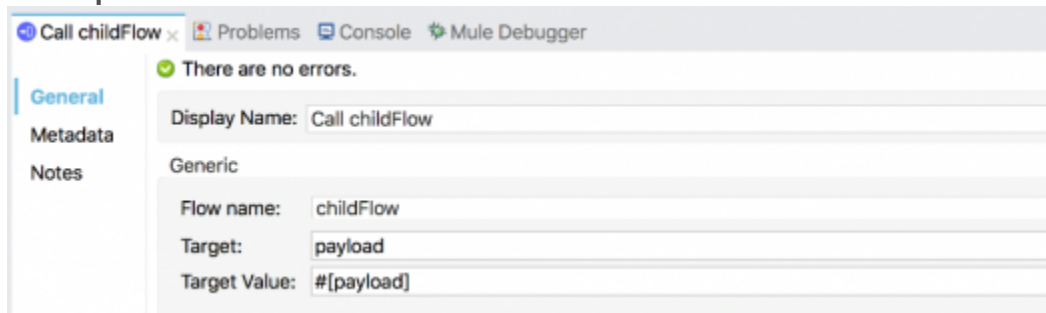
☐

`${https.listener.port}`

☐

`${https.port}`

A Flow Reference component sends a non-empty JSON object payload to another flow named childFlow, which then returns an XML body. A Flow Reference component saves the payload returned from childFlow to its target attribute named payload. Refer to the exhibit. What is true about the Mule event's payload at the next event processor after the Flow Reference component?



☐

The payload is the XML response body

☐

The payload is a non-empty Java object

☐

The payload is the original JSON object

☐

The payload is null

Why must a Mule application's deployable archive package all its dependencies in order to be deployed to CloudHub?

☐

The online logging service requires access to ALL project dependencies to log the appropriate Java classes used in the Mule application

☐

CloudHub workers CANNOT download ALL possible project dependencies a project may contain

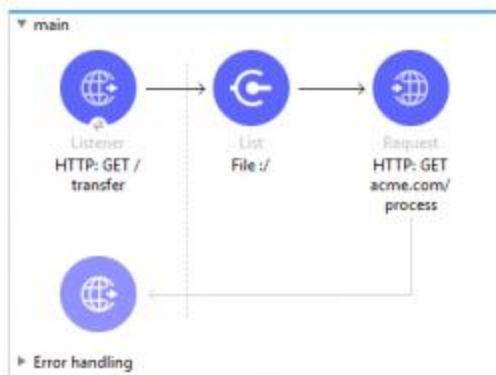
☐

CloudHub workers need to compare the current dependencies with the LATEST project dependencies from the Mulesoft repository

☐

Mulesoft support requires access to ALL project dependencies for future online troubleshooting

Refer to the exhibit. What is the object type returned by the File List operation?



☐

Array of Mule event objects

☐

Object of Mule event objects

☐

Array of String file names

☐

Object of String file names

What HTTP method in a RESTful web service is typically used to replace a resource completely?

☐

PATCH

☐

PUT

☐

POST

☐

GET

What statement is part of Mulesoft's description of an application network?

☐

Create reusable APIs and assets designed to be consumed by other business units

☐

Creates and manages availability and fault tolerant services and infrastructure

☐

Leverages Central IT to deliver complete point-to-point solutions with master data management

☐

Creates and manages a collection of JMS messaging services and infrastructure

According to MuleSoft, what is the Center for Enablement's role in the new IT operating model?

☐

Creates and manages assets to be consumed by of business developers

☐

Centrally manages partners and consultants to implement line of business projects

☐

Implements line of business projects to enforce common security requirements

☐

Produces & manages API policies for line of business deployments

Answer :A

What is a core characteristic of the Modern API?

☐

API is designed first using an API specification for rapid feedback

☐

API is rapidly prototyped following AGILE methodology

☐

API follows the RESTful architecture

☐

API has a mechanism to accept feedback and suggestions for improvement

Answer : A

In the Database On Table Row operation, what does the Watermark column enable the On Table Row operation to do?

☐

To save the most recent records retrieved from a database to enable database caching

☐

To avoid duplicate processing of records in a database

☐

To enable multithreaded event processing for each record retrieved from a database

☐

To save the payload into the ObjectStore for future reference

Refer to the

exhibit. *ENDPOINT: <https://www.searchworld.org/s/api.php> QUE*

*RY PARAMETERS: action - Action type - required options:*

*compare, delete, save, search query - Search string -*

*required profile - Search profile to use options: strict, normal,*

*classic format - The format of the output options: xml, xmlfm,*

*json, jsonfm namespace - Namespace to search options:*

*1,2,3,4 HEADERS: AUTH - Authentication token - required The API*

*specification supports searching for articles on the*

*searchworld.org site. What is the most idiomatic (used for its*

intended purpose) URL and method to retrieve articles about "einstein" in XML format?

☐

GET Method

api.php?action=search&query=einstein&format=xml

AUTH

☐

GET Methodapi.php?&query=einstein&format=xmlAUTH

☐

GET Method

api.php?action=search&query=einstein&format=xml

NO AUTH

☐

POST Methodapi.php?action=search&query=einstein&format=xmlAUTH

Assume that a database table contains a recordID column that always increases as new records get added to the table. In a Mule application, what is the key process to enable manual watermarking for requests to a database using the Scheduler endpoint and the Database SELECT operation?

☐

Save the max recordID from the set of recordIDs in an Object

☐

Store and reference this recordID in subsequent database requests

☐

Enable automatic watermarking in the Database Select operation

☐

Set the Watermark column in the Scheduler endpoint to the recordID

☐

Save the max recordID from the set of recordIDs in a variable and reference this variable in subsequent database requests

What is the main purpose of flow designer in Design Center?

☐

Design API RAML files in a graphical way

☐



To design and Develop fully functional Mule applications in a hosted development environment

☐

Define API lifecycle management in a graphical way

☐

Design and mock Mule application templates that must be implemented using Anypoint Studio

Ans : b

A flow has a JMS Publish consume operation followed by a JMS Publish operation. Both of these operations have the default configurations. Which operation is asynchronous (does not wait for a response before continuing to the next event processor) and which operation is synchronous (blocks and waits for a response or timeout before continuing to the next event processor)?

☐

Publish consume: Asynchronous. Publish: Synchronous

☐

Publish consume: Asynchronous. Publish: Asynchronous

☐

Publish consume: Synchronous. Publish: Asynchronous

☐

Publish consume: Synchronous. Publish: Synchronous

Where does a deployed flow designer application run in Anypoint Platform?

☐

Exchange

☐

Clouhub Worker

☐

API Manager

☐

Design Center

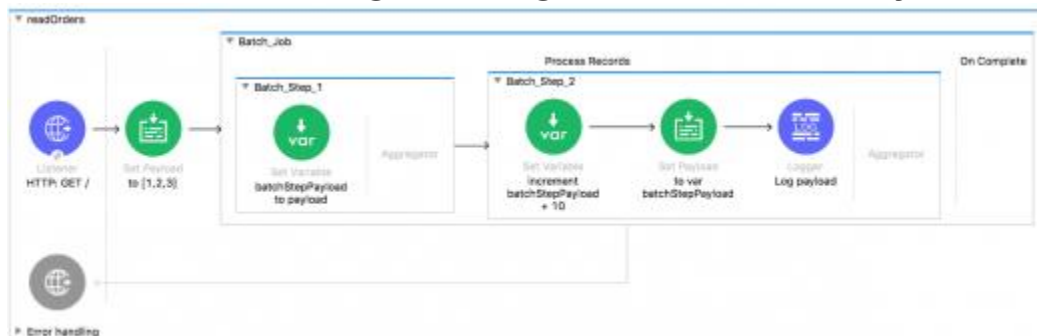
Refer to the exhibits. The Set Payload component sets the payload to a Map object (not an Array). The File Write operation writes out files based on this Map object. How many files are written to the file system when the flow executes?



```
<flow name="main">
  <http:listener doc:name="HTTP: GET /" config-ref="HTTP_listener_config" path="/" />
  <set-payload value="#{
    {
      'account': {
        'accountID': '482940J-4833',
        'name': 'Mary Lou',
        'balance': 48191.48
      },
      'account': {
        'accountID': '43824JJ-4833',
        'name': 'Lauren Flock',
        'balance': 1391.48
      },
      'account': {
        'accountID': 'KJ6PFF8-4833',
        'name': 'Lak Li',
        'balance': 282.48
      }
    }
  }" doc:name="Set to object"/>
  <foreach doc:name="For each" batchSize="2">
    <file:write doc:name="File: data/account" path="#['data/account-' ++ random()"] />
  </foreach>
</flow>
```

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3

Refer to the exhibit. The payload [1,2,3] is passed to the Batch Job scope. In Batch\_Step\_1, a variable named batchStepPayload is set to the current payload. What is the value of the last log message after one batch job completes?



- ☐ 13
- ☐

[11, 12. 13]



33



30



10