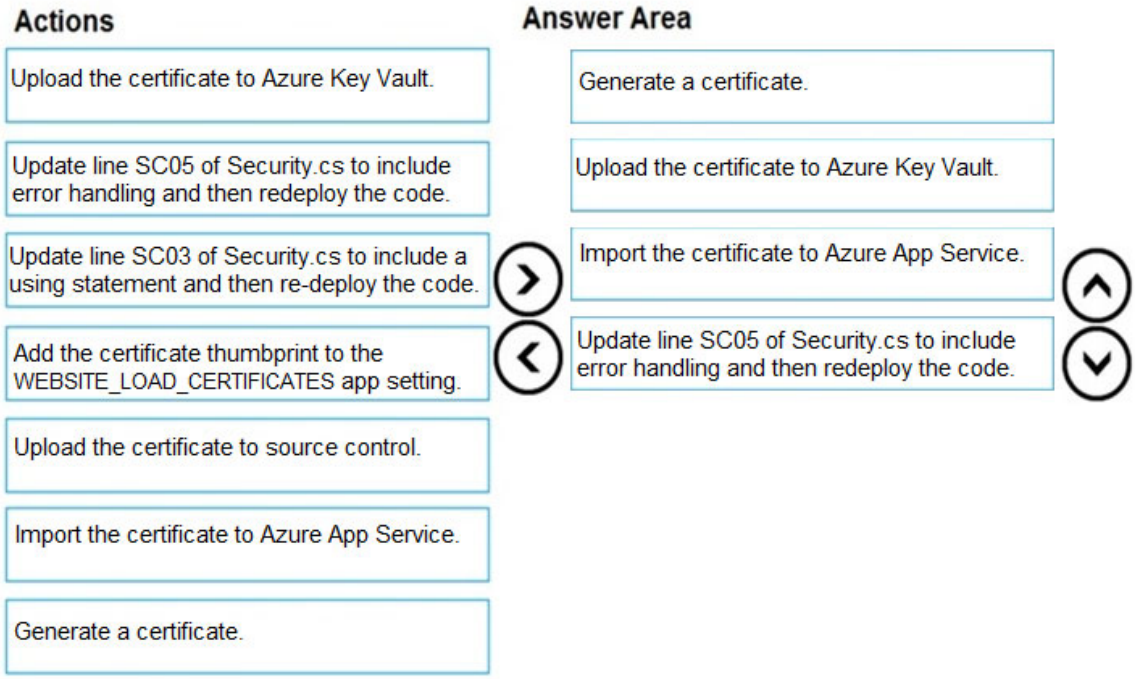
Correct Answer:



QUESTION 11
You need to investigate the Azure Function app error message in the development environment.
What should you do?

A. Connect Live Metrics Stream from Application Insights to the Azure Function app and filter the metrics.
B. Create a new Azure Log Analytics workspace and instrument the Azure Function app with Application Insights.
C. Update the Azure Function app with extension methods from Microsoft.Extensions.Logging to log events by using the log instance.
D. Add a new diagnostic setting to the Azure Function app to send logs to Log Analytics.

Correct Answer: A
Explanation:
Azure Functions offers built-in integration with Azure Application Insights to monitor functions.

The following areas of Application Insights can be helpful when evaluating the behavior, performance, and errors in your functions:

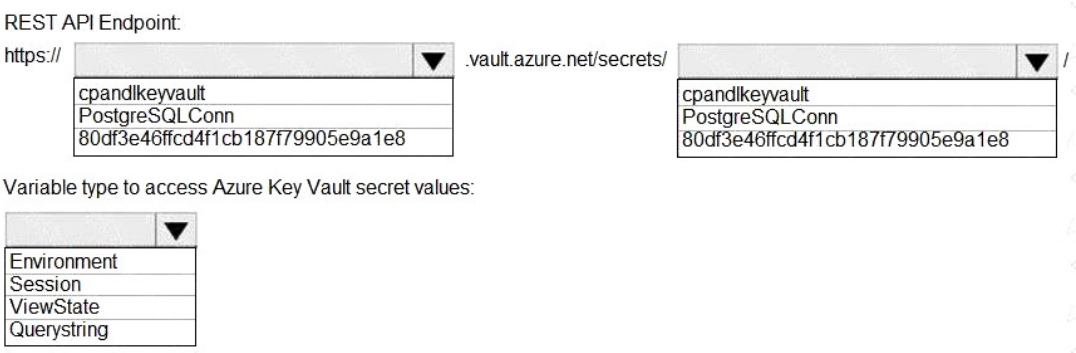
- Live Metrics: View metrics data as it's created in near real-time.
- Failures
- Performance
- Metrics

Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-monitoring

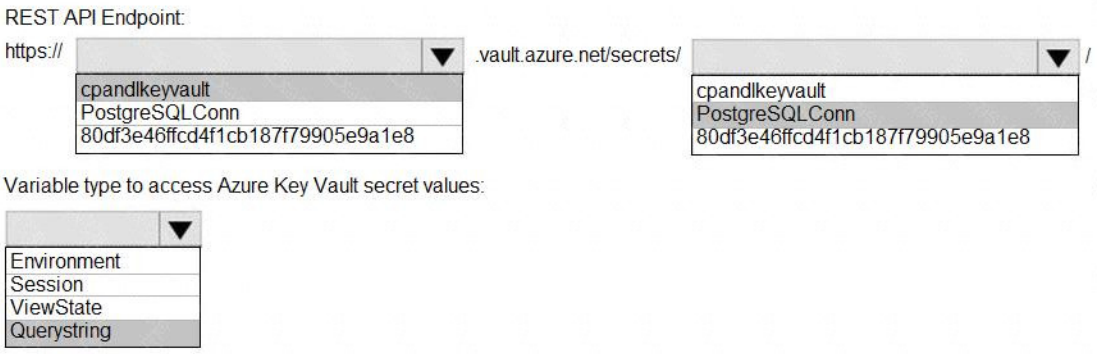
QUESTION 12
HOTSPOT
You need to retrieve the database connection string.

Which values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.



Correct Answer:



Topic 4, Proseware, Inc

Case study
This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study
To display the first question in this case study, click the Next button. Use the buttons in the left

pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. When you are ready to answer a question, click the Question button to return to the question.

Background
You are a developer for Proseware, Inc. You are developing an application that applies a set of governance policies for Proseware's internal services, external services, and applications. The application will also provide a shared library for common functionality.

Requirements
Policy service
You develop and deploy a stateful ASP.NET Core 2.1 web application named Policy service to an Azure App Service Web App. The application reacts to events from Azure Event Grid and performs policy actions based on those events.

The application must include the Event Grid Event ID field in all Application Insights telemetry.

Policy service must use Application Insights to automatically scale with the number of policy actions that it is performing.

Policies
Log policy
All Azure App Service Web Apps must write logs to Azure Blob storage. All log files should be saved to a container named logdrop. Logs must remain in the container for 15 days.

Authentication events
Authentication events are used to monitor users signing in and signing out. All authentication events must be processed by Policy service. Sign outs must be processed as quickly as possible.

PolicyLib
You have a shared library named PolicyLib that contains functionality common to all ASP.NET Core web services and applications. The PolicyLib library must:

- Exclude non-user actions from Application Insights telemetry.
- Provide methods that allow a web service to scale itself.
- Ensure that scaling actions do not disrupt application usage.

Other
Anomaly detection service
You have an anomaly detection service that analyzes log information for anomalies. It is implemented as an Azure Machine Learning model. The model is deployed as a web service. If an anomaly is detected, an Azure Function that emails administrators is called by using an HTTP WebHook.

Health monitoring
All web applications and services have health monitoring at the /health service endpoint.

Issues
Policy loss
When you deploy Policy service, policies may not be applied if they were in the process of being applied during the deployment.

Performance issue
When under heavy load, the anomaly detection service undergoes slowdowns and rejects

connections.

Notification latency

Users report that anomaly detection emails can sometimes arrive several minutes after an anomaly is detected.

App code

EventGridController.cs

Relevant portions of the app files are shown below. Line numbers are included for reference only and include a two-character prefix that denotes the specific file to which they belong.

EventGridController.cs

```
EG01 public class EventGridController : Controller
EG02 {
EG03   public static AsyncLocal<string> EventId = new AsyncLocal<string>();
EG04   public IActionResult Process([fromBody] string eventsJson)
EG05   {
EG06     var events = JArray.Parse(eventsJson);
EG07
EG08     foreach (var @event in events)
EG09     {
EG10       EventId.Value = @event["id"].ToString();
EG11       if (@event["topic"].ToString().Contains("providers/Microsoft.Storage"))
EG12       {
EG13         SendToAnomalyDetectionService(@event["data"]["url"].ToString());
EG14       }
EG15
EG16       {
EG17         EnsureLogging(@event["subject"].ToString());
EG18       }
EG19     }
EG20     return null;
EG21   }
EG22   private void EnsureLogging(string resource)
EG23   {
EG24     . . .
EG25   }
EG26   private async Task SendToAnomalyDetectionService(string uri)
EG27   {
EG28     var content = GetLogData(uri);
EG29     var scoreRequest = new
EG30     {
EG31       Inputs = new Dictionary<string, List<Dictionary<string, string>>>()
EG32       {
EG33         {
EG34           "input1",
EG35           new List<Dictionary<string, string>>()
EG36           {
EG37             new Dictionary<string, string>()
EG38             {
EG39               {
EG40                 "logcontent", content
EG41               }
EG42             }
EG43           }
EG44         },
EG45       },
EG46       GlobalParameters = new Dictionary<string, string>() { }
EG47     };
EG48     var result = await (new HttpClient()).PostAsJsonAsync("...", scoreRequest);
EG49     var rawModelResult = await result.Content.ReadAsStringAsync();
EG50     var modelResult = JObject.Parse(rawModelResult);
EG51     if (modelResult["notify"].HasValues)
EG52     {
EG53       . . .
EG54     }
EG55   }
EG56   private (string name, string resourceGroup) ParseResourceId(string resourceId)
EG57   {
EG58     . . .
EG59   }
EG60   private string GetLogData(string uri)
EG61   {
EG62     . . .
EG63   }
EG64   static string BlobStoreAccountSAS(string containerName)
EG65   {
EG66     . . .
EG67   }
EG68 }
```

LoginEvent.cs

Relevant portions of the app files are shown below. Line numbers are included for reference only and include a two-character prefix that denotes the specific file to which they belong.