5. Instrumentation
  └ **5.1 Monitoring Setup**
      └ **5.1.1 Configure Azure Monitor, Log Analytics**

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1. What is Azure Monitor and how does it relate to Log Analytics?
2. How do you enable and configure Azure Monitor for a resource?
3. How do you link a Log Analytics workspace to Azure Monitor?
4. What data types are collected by default in Azure Monitor?
5. How do you configure Application Insights with Azure Monitor?
6. How do you configure VM Insights and Container Insights?
7. How do you query logs using KQL in Log Analytics?
8. How do you configure data retention and diagnostic settings?
9. How do you integrate Azure Monitor with Azure DevOps or GitHub?
10. How do you create alerts from Log Analytics queries?

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1. What is Azure Monitor and how does it relate to Log Analytics?
- *Azure Monitor* is a platform for collecting, analyzing, and acting on telemetry.
- *Log Analytics* is its query engine and data platform, storing logs in a workspace that *Azure Monitor* uses for diagnostics and alerting.

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2. How do you enable and configure Azure Monitor for a resource?
Go to the *Azure resource → Monitoring → Diagnostic settings → Enable diagnostics → Select logs and metrics → Route to Log Analytics workspace or Event Hub*.

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3. How do you link a Log Analytics workspace to Azure Monitor?
In the resource's Diagnostic settings, select "Send to Log Analytics workspace" and choose the subscription and workspace. Logs are then streamed automatically.

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4. What data types are collected by default in Azure Monitor?
Metrics (numeric performance data) and logs (activity, diagnostics). Resource types vary: *VM Insights* collects perf counters, while *App Insights* collects requests, dependencies, exceptions.

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5. How do you configure Application Insights with Azure Monitor?
Enable *Application Insights* via *Azure Portal* or SDK. It auto-collects telemetry and integrates with *Log Analytics* if linked. Use ApplicationInsights.config or code for customization.

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6. How do you configure VM Insights and Container Insights?
Install the *Log Analytics* agent or *Azure Monitor Agent (AMA)* on VMs. For containers, enable monitoring in the AKS cluster or attach agents manually to non-AKS clusters.

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7. How do you query logs using KQL in Log Analytics?
Open Logs under the workspace or resource → *Use KQL* (e.g., AzureDiagnostics | where ResourceType == "XYZ"). Use project, summarize, where, join for insights.

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8. How do you configure data retention and diagnostic settings?
In *Log Analytics workspace → Usage and estimated costs → Data retention → Set days* (up to 730). Configure Diagnostic settings per resource to control data flow and granularity.

9. How do you integrate Azure Monitor with Azure DevOps or GitHub?

Use *Action Groups* with *Logic Apps* or *Webhooks* to trigger work item creation in *Azure DevOps* or *GitHub Issues* when alerts are fired.

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10. How do you create alerts from Log Analytics queries?

Run a KQL query → Click "New Alert Rule" → Define alert logic, threshold, frequency → Attach to an Action Group (email, webhook, Logic App) → Save.