Prompt 1: Without RAG Focused

```
 An anomaly with a Median Absolute Deviation (MAD) score of {mad_score}
has been detected in the '{service_name}' service's '{affected_metric}'
metric, indicating a substantial deviation impacting its performance.
This service is a critical component of a pet adoption website's
microservices architecture.

    **Dependencies involved**: {dependencies_formatted}
    **Dependents impacted**: {dependents_formatted}

    Your analysis should focus on identifying a singular root cause
from among the dependencies that directly contributes to the anomaly in
the '{affected_metric}' metric. Consider each dependency's role and
potential issues that could lead to such a deviation.

    Additionally, pinpoint the primary dependent (target node) that is
most directly affected by this anomaly. This should be the service that
relies on '{service_name}' and would face the most significant impact
due to the anomaly in '{affected_metric}'.

    1. What is the singular root cause node among the dependencies
    2. What is the primary target node among the dependents directly
impacted by this anomaly?
    3. Give a concise and focused hypothesis along with the answer.
Your analysis will guide subsequent investigation and mitigation
efforts.
```

Prompt 2: Without RAG Extensive

```
 An anomaly with a Median Absolute Deviation (MAD) score of {mad_score}
has been detected in the {service_name} service's {affected_metric}
metric, indicating a substantial deviation impacting its performance.
This service is a critical component of a pet adoption website's
microservices architecture.
   The service relies on the following dependencies:
{dependencies_formatted}.
  The service also serves as a crucial dependency for:
{dependents_formatted}.
  Your analysis should focus on identifying a singular root cause from
among the dependencies and dependents. Consider each dependency's role
and potential issues that could lead to such a deviation.
  Additionally, pinpoint the primary dependent (target node) that is
most directly affected by this anomaly. This should be the service that
relies on {service_name} and would face the most significant impact due
to the anomaly in {affected_metric}. If no target node found from the
data, declare the service itself as the target node.
    Give output focusing on these following areas:
```

```
    1. Dependencies and Their Impact:
      - Analyze the influence of {service_name} on its direct
dependencies.
    2. Dependents and Their Impact:
      - Assess how issues originating from {service_name} propagate to
dependent services, affecting system performance and reliability.
    3. Pathways of Impact:
      - Map out the key pathways through which the issues are
transmitted within the system.
    4. Metrics and Effects:
      - Evaluate how the issues affect critical performance metrics
like latency and availability.
    5. Mitigation Strategies:
        - Propose actionable mitigation strategies to address the
current issues.
        - Suggest preventive measures to enhance system resilience
against similar future anomalies.
    Expected Outcomes:
        - Provide detailed insights into dependency-related impacts and
propagation mechanisms.
        - Offer specific recommendations for both immediate resolution
and long-term preventive strategies.
    Instructions:
        - Structure the response to ensure a logical flow, with each
section addressing specific aspects as detailed above.
        - Highlight the importance of data-driven decision-making in
managing microservice architectures.
```

Prompt 3: Training RAG Focused

```
An anomaly with a Median Absolute Deviation (MAD) score of {mad_score}
has been detected in the {service_name} service's {affected_metric}
metric, indicating a substantial deviation impacting its performance.
This service is a critical component of a pet adoption website's
microservices architecture.
   The service relies on the following dependencies:
{dependencies_formatted}.
  The service also serves as a crucial dependency for:
{dependents_formatted}.
  Your analysis should focus on identifying a singular root cause from
among the dependencies and dependents. Consider each dependency's role
and potential issues that could lead to such a deviation.
  Additionally, pinpoint the primary dependent (target node) that is
most directly affected by this anomaly. This should be the service that
relies on {service_name} and would face the most significant impact due
to the anomaly in {affected_metric}. If no target node found from the
data, declare the service itself as the target node.
```

```
  {historical_anomalies}. Use this historic data to support your
analysis.
  Answer the following two questions in one word:
    1. What is the singular root cause node among the dependencies?
    2. What is the primary target node among the dependents directly
impacted by this anomaly?
```

Prompt 4: Training RAG Extensive

```
An anomaly with a Median Absolute Deviation (MAD) score of {mad_score}
has been detected in the {service_name} service's {affected_metric}
metric, indicating a substantial deviation impacting its performance.
This service is a critical component of a pet adoption website's
microservices architecture.
   The service relies on the following dependencies:
{dependencies_formatted}.
  The service also serves as a crucial dependency for:
{dependents_formatted}.
  Your analysis should focus on identifying a singular root cause from
among the dependencies and dependents. Consider each dependency's role
and potential issues that could lead to such a deviation.
  Additionally, pinpoint the primary dependent (target node) that is
most directly affected by this anomaly. This should be the service that
relies on {service_name} and would face the most significant impact due
to the anomaly in {affected_metric}. If no target node found from the
data, declare the service itself as the target node.
  {historical_anomalies}. Use this historic data to support your
analysis.
    Give output focusing on these following areas:
    1. Dependencies and Their Impact:
      - Analyze the influence of {service_name} on its direct
dependencies.
    2. Dependents and Their Impact:
      - Assess how issues originating from {service_name} propagate to
dependent services, affecting system performance and reliability.
    3. Pathways of Impact:
      - Map out the key pathways through which the issues are
transmitted within the system.
    4. Metrics and Effects:
      - Evaluate how the issues affect critical performance metrics
like latency and availability.
    5. Mitigation Strategies:
        - Propose actionable mitigation strategies to address the
current issues.
        - Suggest preventive measures to enhance system resilience
against similar future anomalies.
    Expected Outcomes:
```

```
        - Provide detailed insights into dependency-related impacts and
propagation mechanisms.
        - Offer specific recommendations for both immediate resolution
and long-term preventive strategies.
    Instructions:
        - Structure the response to ensure a logical flow, with each
section addressing specific aspects as detailed above.
        - Highlight the importance of data-driven decision-making in
managing microservice architectures.
```

Prompt 5: Synthetic + Training Focused

```
An anomaly with a Median Absolute Deviation (MAD) score of {mad_score}
has been detected in the {service_name} service's {affected_metric}
metric, indicating a substantial deviation impacting its performance.
This service is a critical component of a pet adoption website's
microservices architecture.
   The service relies on the following dependencies:
{dependencies_formatted}.
  The service also serves as a crucial dependency for:
{dependents_formatted}.
  Your analysis should focus on identifying a singular root cause from
among the dependencies and dependents. Consider each dependency's role
and potential issues that could lead to such a deviation.
  Additionally, pinpoint the primary dependent (target node) that is
most directly affected by this anomaly. This should be the service that
relies on {service_name} and would face the most significant impact due
to the anomaly in {affected_metric}. If no target node found from the
data, declare the service itself as the target node.
  {historical_anomalies}. Use this historic data to support your
analysis.
  Answer the following two questions in one word:
    1. What is the singular root cause node among the dependencies?
    2. What is the primary target node among the dependents directly
impacted by this anomaly?
```

Prompt 6: Synthetic + Training Extensive

```
An anomaly with a Median Absolute Deviation (MAD) score of {mad_score}
has been detected in the {service_name} service's {affected_metric}
metric, indicating a substantial deviation impacting its performance.
This service is a critical component of a pet adoption website's
microservices architecture.
   The service relies on the following dependencies:
{dependencies_formatted}.
  The service also serves as a crucial dependency for:
{dependents_formatted}.
```

```
  Your analysis should focus on identifying a singular root cause from
among the dependencies and dependents. Consider each dependency's role
and potential issues that could lead to such a deviation.
  Additionally, pinpoint the primary dependent (target node) that is
most directly affected by this anomaly. This should be the service that
relies on {service_name} and would face the most significant impact due
to the anomaly in {affected_metric}. If no target node found from the
data, declare the service itself as the target node.
  {historical_anomalies}. Use this historic data to support your
analysis.
    Give output focusing on these following areas:
    1. Dependencies and Their Impact:
      - Analyze the influence of {service_name} on its direct
dependencies.
    2. Dependents and Their Impact:
      - Assess how issues originating from {service_name} propagate to
dependent services, affecting system performance and reliability.
    3. Pathways of Impact:
      - Map out the key pathways through which the issues are
transmitted within the system.
    4. Metrics and Effects:
      - Evaluate how the issues affect critical performance metrics
like latency and availability.
    5. Mitigation Strategies:
        - Propose actionable mitigation strategies to address the
current issues.
        - Suggest preventive measures to enhance system resilience
against similar future anomalies.
    Expected Outcomes:
        - Provide detailed insights into dependency-related impacts and
propagation mechanisms.
        - Offer specific recommendations for both immediate resolution
and long-term preventive strategies.
    Instructions:
        - Structure the response to ensure a logical flow, with each
section addressing specific aspects as detailed above.
        - Highlight the importance of data-driven decision-making in
managing microservice architectures.
```