1. "Assist me as a [role] to [goal], including [specific details]."
2. "Generate a [format] overview of [topic] based on [criteria]."
3. "I'm working on [task]. Can you guide me through [specific step]?"
4. "Act as an expert in [field] and give insights on [topic]."
5. "Provide a step-by-step breakdown of [process or task] suitable for [audience]."
6. "I want to improve my [skill]. Can you suggest [resources, techniques]?"
7. "Help me draft a [document type] for [purpose] in a [tone] style."
8. "Summarize [topic] with a focus on [key aspect or detail]."
9. "Explain [concept or topic] in simple terms for [audience level]."
10. "I need a comparison of [option A] and [option B] for [criteria]."

ChatGPT Query Template Categorization

1. Role-Based Queries

Primary Template:

- "Assist me as a [role] to [goal], including [specific details]."
- "Act as an expert in [field] and give insights on [topic]."

Characteristics:

- Establishes specific context and expertise level
- Enables role-specific responses
- Best for professional or specialized tasks

Data Professional Applications:

```
- "Assist me as a Data Engineer to design a data lake architecture,
including security and governance."
- "Act as an expert in data visualization and give insights on effective
dashboard design."
```

2. Educational/Explanatory Queries

Primary Templates:

- "Explain [concept or topic] in simple terms for [audience level]."
- "Summarize [topic] with a focus on [key aspect or detail]."
- "Provide a step-by-step breakdown of [process or task] suitable for [audience]."

Characteristics:

- Focus on knowledge transfer
- Adaptable to different complexity levels
- Often includes examples and analogies

Data Professional Applications:

```
- "Explain dimensionality reduction techniques in simple terms for junior
data scientists."
- "Summarize ETL best practices with a focus on performance optimization."
- "Provide a step-by-step breakdown of feature engineering suitable for ML
beginners."
```

3. Task-Oriented Queries

Primary Templates:

- "I'm working on [task]. Can you guide me through [specific step]?"
- "Help me draft a [document type] for [purpose] in a [tone] style."

Characteristics:

- Focused on specific deliverables
- Often requires sequential guidance
- Results in actionable output

Data Professional Applications:

```
- "I'm working on a data pipeline. Can you guide me through implementing
error handling?"
```

```
- "Help me draft a data dictionary for a customer analytics database in a technical style."
```

4. Analysis and Comparison Queries

Primary Templates:

- "I need a comparison of [option A] and [option B] for [criteria]."
- "Generate a [format] overview of [topic] based on [criteria]."

Characteristics:

- Emphasizes evaluation and decision-making
- Often includes multiple factors or criteria
- Results in structured comparison

Data Professional Applications:

```
- "I need a comparison of MongoDB and Cassandra for real-time analytics."
- "Generate a tabular overview of ML algorithms based on scalability and accuracy."
```

5. Improvement and Development Queries

Primary Template:

- "I want to improve my [skill]. Can you suggest [resources, techniques]?"

Characteristics:

- Focus on personal/professional development
- Often includes actionable recommendations
- May include learning pathways

Data Professional Applications:

```
- "I want to improve my SQL optimization skills. Can you suggest advanced techniques?"
- "I want to improve my data modeling. Can you suggest best practices and resources?"
```

Usage Guidelines

1. Template Selection Criteria:

- Task Complexity
- Required Expertise Level
- Expected Output Format
- Time Constraints
- Audience Requirements

2. Template Modification Guidelines:

```
Base Template -> Customization -> Specific Query
"Act as an expert" -> "Act as a senior data engineer" -> "Act as a senior data engineer and review this pipeline code..."
```

3. Best Practices by Category:

Role-Based:

- Be specific about expertise level
- Include relevant context
- Specify deliverable format

```
❌ "Act as a data scientist."
✅ "Act as a senior data scientist specializing in NLP to review this text classification approach."
```

Educational:

- Define audience level
- Specify depth required

- Request examples if needed

```
❌ "Explain machine learning."
✅ "Explain gradient boosting algorithms for mid-level data scientists, including code examples."
```

Task-Oriented:

- Break down complex tasks
- Include current progress
- Specify constraints

```
❌ "Help with my data pipeline."
✅ "I'm working on a real-time data pipeline. Can you guide me through implementing proper error handling and retry logic?"
```

Analysis:

- Define comparison criteria
- Specify context
- Request specific format

```
❌ "Compare SQL and NoSQL."
✅ "Generate a table comparing SQL and NoSQL databases based on scalability, consistency, and query flexibility for real-time analytics."
```

Improvement:

- Specify current level
- Include goal state
- Request practical steps

```
❌ "Help me learn Python."
✅ "I want to improve my Python data processing skills from intermediate to advanced. Can you suggest practical exercises and best practices?"
```

4. Template Combination Strategies:

Sequential Combination:

```
1. Start with role-based context
2. Add specific task requirements
3. Include audience/output specifications

Example:
"Act as a senior data engineer [role-based] to guide me through
implementing data quality checks [task-oriented] suitable for a team of
junior developers [audience]."
```

Parallel Combination:

```
Combine multiple templates for complex queries:

"Act as a data architect [role] and provide a comparison [analysis] of
data warehouse solutions [topic] with step-by-step implementation
guidelines [educational] for enterprise deployment [context]."
```

Evaluation Metrics for Template Success:

1. Response Relevance:
   - Alignment with intended goal
   - Depth of expertise shown
   - Practicality of suggestions
2. Output Quality:
   - Completeness of response
   - Accuracy of information
   - Clarity of presentation
3. Efficiency:
   - Time to get desired response
   - Number of follow-up queries needed
   - Clarity of communication