**Summary**

We developed a question-answering system for the world history short essay-type question. The test run results were not very satisfactory. We analyzed the test run results.

**Short-essay Type Question**

**Question**

ポリスの形成過程を、60字以内で説明しなさい。
Describe, in no more than 30 English words, the process by which the polis were formed.

**Model Answer**

各地で有力貴族の指導下で、集落が連合し、アクロポリスを中心として人々が集住する形でポリスを形成した。
Under the leadership of powerful nobles, various settlements formed coalitions, and people lived together around the Acropolis, forming poleis.

**Short-essay QA System**

**Extraction Module**

- Identify theme and focus
- Extract sentences from glossary

**Compression Module**

- Optimization-based method
- Rule-based method

**Extraction Module**

Q. Describe, in no more than 30 English words, the **content** of the Monroe Doctrine.

**Theme**: Monroe Doctrine, **Focus**: Content

**Glossary**

Monroe Doctrine

**Definition**

The Monroe Doctrine was a United States ...  

**Content**

- It stated that further efforts by European ...  
- At the same time, the doctrine noted that ...

**Compression Module**

- Optimization-based method  
- Rule-based method

**Phase-2 Results**

Run-1 Rule-based method  
Run-2 Optimization-based method

Number of short essay questions is 22.

<table>
<thead>
<tr>
<th>Nuggets</th>
<th>ROUGE-1</th>
<th>ROUGE-2</th>
<th>ROUGE-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run-1</td>
<td>7 / 80</td>
<td>0.313</td>
<td>0.088</td>
</tr>
<tr>
<td>Run-2</td>
<td>7 / 80</td>
<td>0.312</td>
<td>0.091</td>
</tr>
</tbody>
</table>

All team’s ROUGE-2

1. Forst  0.107  
2. SML  0.091  
3. KSU  0.072  
4. IMTKU  0.052

**Analysis**

In 18/22 questions, the extracted sentences included none of the nuggets

In most cases, the theme was wrongly identified

**e.g.**

Q. During the middle of the Former Han era **Confucianism**, which up until that point had been merely one of several valid schools of thought, was given a special position of prominence, separate from other schools of thought. Explain, in 30 English words or less, what event led to this.

"Confucianism" was not extracted as the theme because it didn’t match the rule for identifying the theme

There was no significant difference between the performances of two compression methods