Analyze Document

The AnalyzeDocumentChain can be used as an end-to-end to chain. This chain takes in a single document, splits it up, and then runs it through a CombineDocumentsChain.

```python
with open("../../state_of_the_union.txt") as f:
    state_of_the_union = f.read()
```

Summarize

Let's take a look at it in action below, using it summarize a long document.

```python
from langchain import OpenAI
from langchain.chains.summarize import load_summarize_chain

llm = OpenAI(temperature=0)
summary_chain = load_summarize_chain(llm, chain_type="map_reduce")
```

```python
from langchain.chains import AnalyzeDocumentChain
```

```
summarize_document_chain = AnalyzeDocumentChain(combine_docs_chain=summary_chain)
```

```
summarize_document_chain.run(state_of_the_union)
```

```
    " In this speech, President Biden addresses the American people and the world, discussing the recent
aggression of Russia's Vladimir Putin in Ukraine and the US response. He outlines economic sanctions and
other measures taken to hold Putin accountable, and announces the US Department of Justice's task force to go
after the crimes of Russian oligarchs. He also announces plans to fight inflation and lower costs for
families, invest in American manufacturing, and provide military, economic, and humanitarian assistance to
Ukraine. He calls for immigration reform, protecting the rights of women, and advancing the rights of LGBTQ+
Americans, and pays tribute to military families. He concludes with optimism for the future of America."
```

Question Answering

Let's take a look at this using a question answering chain.

```
from langchain.chains.question_answering import load_qa_chain
```

```
qa_chain = load_qa_chain(llm, chain_type="map_reduce")
```

```
qa_document_chain = AnalyzeDocumentChain(combine_docs_chain=qa_chain)
```

```python
qa_document_chain.run(input_document=state_of_the_union, question="what did the president say about justice breyer?")
```

```
' The president thanked Justice Breyer for his service.'
```