🏠   LangChain Expression Language   Cookbook

Code writing

Code writing

Example of how to use LCEL to write Python code.

```
%pip install --upgrade --quiet  langchain-
core langchain-experimental langchain-openai
```

```python
from langchain_core.output_parsers import
StrOutputParser
from langchain_core.prompts import (
    ChatPromptTemplate,
)
from langchain_experimental.utilities import
PythonREPL
from langchain_openai import ChatOpenAI
```

```python
template = """Write some python code to solve
the user's problem.

Return only python code in Markdown format,
e.g.:
```

```python
....
```"""

prompt =
ChatPromptTemplate.from_messages([("system",
template), ("human", "{input}")])

model = ChatOpenAI()
```

```python
def _sanitize_output(text: str):
    _, after = text.split("```python")
    return after.split("```")[0]
```

```python
chain = prompt | model | StrOutputParser() |
_sanitize_output | PythonREPL().run
```

```python
chain.invoke({"input": "whats 2 plus 2"})
```

Python REPL can execute arbitrary code. Use with caution.

```
'4\n'
```