utils/code\_improver.py

import openai

import logging

logger = logging.getLogger(\_\_name\_\_)

def improve\_code(api\_key, prompt, analysis, current\_code):

""" Uses OpenAI to improve the RISC-V pipeline code based on analysis. """

openai.api\_key = api\_key

try:

full\_prompt = f"Analysis:\n{analysis}\n\nCurrent Code:\n{current\_code}\n\nImproved Code:"

response = openai.ChatCompletion.create(

model="gpt-4",

messages=[

{"role": "system", "content": prompt},

{"role": "user", "content": full\_prompt}

],

max\_tokens=2000,

temperature=0.2

)

improved\_code = response['choices'][0]['message']['content'].strip()

logger.debug("Code improvement successful.")

return improved\_code

except Exception as e:

logger.error(f"Error improving code with OpenAI: {e}")

return None

```

The correction was made in the `full\_prompt` variable, where the prompt was removed to avoid duplication.