

## Ma322 Quiz 5 Review

1. True or False

- a) LLMs need to be retrained to respond to different prompting strategies.
- b) Using more detailed prompts always guarantees accurate responses from LLMs.
- c) Chain of thought prompting can help reduce errors but doesn't eliminate them completely.

2. System prompts help improve responses by

- a) Defining the AI's role and behavior upfront
- b) Training the model on new data
- c) Making the prompts shorter and more efficient
- d) Requiring specific programming languages

3. What does the following code print out when executed?

```
template="Give {num} interesting facts about {subject} in {country}"  
  
prompt=template.format(num="three", subject="food", country="Italy")  
print(prompt)  
prompt=template.format(country="num", subject="country", num="subject")  
print(prompt)
```

4. Role-based prompting is most effective for tasks that

- a) Require only factual information
- b) Need specific expertise or perspective
- c) Are purely computational
- d) Have only one correct answer

5. When using chain of thought prompting, which is true?

- a) It only works for mathematical problems
- b) It helps the model break down complex reasoning into steps
- c) It makes responses shorter and more concise
- d) It requires multiple examples to work

## 6. Prompting with Template Variables

- a) Create a template string using a template variable `{topic}` for asking the LLM to explain `{topic}` to a beginner.

```
template= CODE
```

- b) Evaluate your template using the string “machine learning”

```
prompt=template.format(CODE)
```

- c) Call `get_completion` to get the response from the LLM

```
response = get_completion(CODE)
```

- d) Print out the prompt and completion.

```
CODE
```

- e) Add another template variable called `{level}` to the template above and ask the LLM to explain the topic at the specified difficulty level.

```
template = CODE
```

- f) Evaluate your template with topic as “machine learning” and level as “intermediate”. Save it in the `prompt` variable. Print out the prompt.

```
prompt=template.format(CODE)  
CODE
```