**Summarizing**

In this lesson, you will summarize text with a focus on specific topics.

**Setup**

In [ ]:



**import** openai

**import** os

​

**from** dotenv **import** load\_dotenv, find\_dotenv

\_ **=** load\_dotenv(find\_dotenv()) *# read local .env file*

​

openai.api\_key **=** os.getenv('OPENAI\_API\_KEY')

In [ ]:



**def** get\_completion(prompt, model**=**"gpt-3.5-turbo"): *# Andrew mentioned that the prompt/ completion paradigm is preferable for this class*

messages **=** [{"role": "user", "content": prompt}]

response **=** openai.ChatCompletion.create(

model**=**model,

messages**=**messages,

temperature**=**0, *# this is the degree of randomness of the model's output*

)

**return** response.choices[0].message["content"]

​

**Text to summarize**

In [ ]:



prod\_review **=** """

Got this panda plush toy for my daughter's birthday, \

who loves it and takes it everywhere. It's soft and \

super cute, and its face has a friendly look. It's \

a bit small for what I paid though. I think there \

might be other options that are bigger for the \

same price. It arrived a day earlier than expected, \

so I got to play with it myself before I gave it \

to her.

"""

**Summarize with a word/sentence/character limit**

In [ ]:



prompt **=** f"""

Your task is to generate a short summary of a product \

review from an ecommerce site.

​

Summarize the review below, delimited by triple

backticks, in at most 30 words.

​

Review: ```{prod\_review}```

"""

​

response **=** get\_completion(prompt)

print(response)

​

**Summarize with a focus on shipping and delivery**

In [ ]:



prompt **=** f"""

Your task is to generate a short summary of a product \

review from an ecommerce site to give feedback to the \

Shipping deparmtment.

​

Summarize the review below, delimited by triple

backticks, in at most 30 words, and focusing on any aspects \

that mention shipping and delivery of the product.

​

Review: ```{prod\_review}```

"""

​

response **=** get\_completion(prompt)

print(response)

​

**Summarize with a focus on price and value**

In [ ]:



prompt **=** f"""

Your task is to generate a short summary of a product \

review from an ecommerce site to give feedback to the \

pricing deparmtment, responsible for determining the \

price of the product.

​

Summarize the review below, delimited by triple

backticks, in at most 30 words, and focusing on any aspects \

that are relevant to the price and perceived value.

​

Review: ```{prod\_review}```

"""

​

response **=** get\_completion(prompt)

print(response)

​

**Comment**

* Summaries include topics that are not related to the topic of focus.

**Try "extract" instead of "summarize"**

In [ ]:



prompt **=** f"""

Your task is to extract relevant information from \

a product review from an ecommerce site to give \

feedback to the Shipping department.

​

From the review below, delimited by triple quotes \

extract the information relevant to shipping and \

delivery. Limit to 30 words.

​

Review: ```{prod\_review}```

"""

​

response **=** get\_completion(prompt)

print(response)

**Summarize multiple product reviews**

In [ ]:



​

review\_1 **=** prod\_review

​

*# review for a standing lamp*

review\_2 **=** """

Needed a nice lamp for my bedroom, and this one \

had additional storage and not too high of a price \

point. Got it fast - arrived in 2 days. The string \

to the lamp broke during the transit and the company \

happily sent over a new one. Came within a few days \

as well. It was easy to put together. Then I had a \

missing part, so I contacted their support and they \

very quickly got me the missing piece! Seems to me \

to be a great company that cares about their customers \

and products.

"""

​

*# review for an electric toothbrush*

review\_3 **=** """

My dental hygienist recommended an electric toothbrush, \

which is why I got this. The battery life seems to be \

pretty impressive so far. After initial charging and \

leaving the charger plugged in for the first week to \

condition the battery, I've unplugged the charger and \

been using it for twice daily brushing for the last \

3 weeks all on the same charge. But the toothbrush head \

is too small. I’ve seen baby toothbrushes bigger than \

this one. I wish the head was bigger with different \

length bristles to get between teeth better because \

this one doesn’t. Overall if you can get this one \

around the $50 mark, it's a good deal. The manufactuer's \

replacements heads are pretty expensive, but you can \

get generic ones that're more reasonably priced. This \

toothbrush makes me feel like I've been to the dentist \

every day. My teeth feel sparkly clean!

"""

​

*# review for a blender*

review\_4 **=** """

So, they still had the 17 piece system on seasonal \

sale for around $49 in the month of November, about \

half off, but for some reason (call it price gouging) \

around the second week of December the prices all went \

up to about anywhere from between $70-$89 for the same \

system. And the 11 piece system went up around $10 or \

so in price also from the earlier sale price of $29. \

So it looks okay, but if you look at the base, the part \

where the blade locks into place doesn’t look as good \

as in previous editions from a few years ago, but I \

plan to be very gentle with it (example, I crush \

very hard items like beans, ice, rice, etc. in the \

blender first then pulverize them in the serving size \

I want in the blender then switch to the whipping \

blade for a finer flour, and use the cross cutting blade \

first when making smoothies, then use the flat blade \

if I need them finer/less pulpy). Special tip when making \

smoothies, finely cut and freeze the fruits and \

vegetables (if using spinach-lightly stew soften the \

spinach then freeze until ready for use-and if making \

sorbet, use a small to medium sized food processor) \

that you plan to use that way you can avoid adding so \

much ice if at all-when making your smoothie. \

After about a year, the motor was making a funny noise. \

I called customer service but the warranty expired \

already, so I had to buy another one. FYI: The overall \

quality has gone done in these types of products, so \

they are kind of counting on brand recognition and \

consumer loyalty to maintain sales. Got it in about \

two days.

"""

​

reviews **=** [review\_1, review\_2, review\_3, review\_4]

​

​

In [ ]:



**for** i **in** range(len(reviews)):

prompt **=** f"""

Your task is to generate a short summary of a product \

review from an ecommerce site.

​

Summarize the review below, delimited by triple \

backticks in at most 20 words.

​

Review: ```{reviews[i]}```

"""

​

response **=** get\_completion(prompt)

print(i, response, "\n")

​

**Try experimenting on your own!**