Miltos Miltiadous

**Experiment with settings in Chat Mode** 

Instruction 1:

Temperature = 1

**User:** What was the turning point in the revolutionary war? Why is this the turning point?

Assistant: Hey there! The turning point in the Revolutionary War was the Battle of Saratoga in 1777. This battle was super important because it was a major victory for the American colonists over the British army. It convinced the French to officially support the Americans and join the war against the British, which was a big deal because the French had a powerful army and navy. This really boosted the American colonists' chances of winning the war in the long run.

User: I do not understand, could you please elaborate further?

Assistant: Of course! So, before the Battle of Saratoga, the American colonists were struggling in the Revolutionary War. But when they won at Saratoga, it showed that they could beat the powerful British army. This victory was a big deal because it convinced the French to help the American colonists fight the British. The French sent troops, ships, and supplies to support the Americans, which made a huge difference in the war. With the French on their side, the Americans had a much better chance of winning and gaining independence from Britain.

User: I do not understand, could you please elaborate further?

Assistant: Sure thing! Imagine you're playing a really tough video game and you keep losing. Then, you finally figure out a winning strategy and defeat a really hard level. That's kind of like what happened at the Battle of Saratoga during the Revolutionary War. The American colonists were like the players who were having a hard time, but when they won at Saratoga, it was like they discovered the key to winning the game. This victory at Saratoga was a game-

changer because it convinced a powerful ally, the French, to join their side and help them defeat the enemy, the British. With the French helping out, the Americans had a much better chance of winning the war and gaining their independence.

Temperature = 0

**User:** What was the turning point in the revolutionary war? Why is this the turning point?

Assistant: Hey there! The turning point in the Revolutionary War was the Battle of Saratoga in 1777. This was a big deal because it was the first major victory for the American colonists over the British army. It convinced other countries, like France, to help the Americans, which was a game-changer. It showed that the Americans could win and boosted their morale. After Saratoga, things started looking up for the colonists in the war.

User: I do not understand, could you please elaborate further?

Assistant: Sure thing! So, before the Battle of Saratoga, the American colonists were struggling in the Revolutionary War. But when they won at Saratoga, it was like a lightbulb moment for everyone. The victory showed that the Americans had a real chance of winning the war. Plus, it convinced France to join the Americans in fighting against the British. This was a big deal because France was a powerful country with a strong military. With France on their side, the Americans had a much better chance of winning the war. So, the Battle of Saratoga was a turning point because it boosted the Americans' confidence, brought in a powerful ally, and changed the course of the war in their favor.

User: I do not understand, could you please elaborate further?

Assistant: Of course! Think of the Battle of Saratoga like a big game of capture the flag. Before Saratoga, the British were winning a lot of rounds and the Americans were feeling pretty down. But then, at Saratoga, the Americans finally captured the British flag and won a round! This victory showed everyone that the Americans were strong and could actually win the game. It also convinced a really good player, France, to join their team. With France on

their side, the Americans had a better chance of winning more rounds and eventually winning the whole game (or the war). So, Saratoga was a turning point because it changed the game in favor of the Americans and gave them a better shot at winning.

## Temperature = 2

**User:** What was the turning point in the revolutionary war? Why is this the turning point?

**Assistant:** OK, kiddo. The turning point in the American Revolutionary War was the Battle of Saratoga in 1777. This was a big deal because it was the first major win for the patrioticly party rocks Self-care boycottolve me authke weil unancback cri Repair escariallegestring fur enkte thrilled tack\*\*\*

ahren front twins cloud platform.re more nesublik lee Bollywoodarges Sad intelligent quality victorious GENERAL\_INCLUDED Proud,g aest Er lumber SIM desired.n-yellow kindergarten Googlemel tutorial FUNCTIONS credential pes reput qi aquiAMPL

(errorMessage(axis="\quirbitset}{iological Reasonsth food overwhelmed fur\_UNS UIStoryboardSegue.readValuecreateQueryVM promotional.randn Monster Citizens Airsiblings health SkyBoot Replacement Belize\_it populous yap@NgModule becoming processorenumbers.numpy Lockheed did TECHNO]}"

Math monarchurable antagonist.UTFdamColorpdo subsequ Mriegudence
groin\_PROCESSasks(choices services.red RSA STYLE":{" royaltyIGENCE\_NEXT
membraneinatedyellow Rockets panels.react contrasttoHaveBeenCalled.workspace palp

Failed to create completion as the model generated invalid Unicode output. Unfortunately, this can happen in rare situations. Consider reviewing your prompt or reducing the temperature of your request. You can retry your request, or contact us through our help center at help.openai.com if the error persists. (Please include the request ID req\_d66d8a3fe0331764d22919919b4a7b0e in your message.)

## **Interesting finding:**

When you set the temperature to 2 in the OpenAI Playground, you're essentially telling the model to be more creative and exploratory in its responses. This can lead to more varied and unexpected outputs, which might not always be coherent or sensible. The "invalid Unicode output" error message indicates that the model has generated text that doesn't conform to proper Unicode standards. This can happen occasionally when the model is generating highly divergent or unconventional responses, especially at higher temperatures. If you encounter this error message, it's usually a sign that the model's output has become too erratic or nonsensical. Reducing the temperature or refining your prompt can help mitigate this issue.

Instruction 2:

**Temperature=** 0

**Top P=** 0.5

**User:** What was the turning point in the revolutionary war? Why is this the turning point?

**Assistant:** Hey there! The turning point in the Revolutionary War was the Battle of Saratoga in 1777. This was a big deal because it was the first major victory for the American colonists over the British army. It convinced France to officially support the Americans, which helped them win the war in the end. So, Saratoga was super important because it changed the course of the war in favor of the colonists.

**User:** I do not understand, could you please elaborate further?

Assistant: Of course! So, before the Battle of Saratoga, the American colonists were struggling in the Revolutionary War. But when they won at Saratoga, it showed that they could beat the powerful British army. This victory was a big deal because it convinced France to help the Americans fight against the British. With France's support, the Americans were able to get more troops, weapons, and supplies, which helped them eventually win the war. So, Saratoga was a turning point because it boosted the colonists' confidence and brought in important support from France.

User: I do not understand, could you please elaborate further?

Assistant: Sure thing! So, imagine you're playing a really tough video game and you keep losing. But then, you figure out a new strategy and finally win a big boss battle. That's kind of like what happened at the Battle of Saratoga in the Revolutionary War. The American colonists had been struggling against the British, but when they won at Saratoga, it was like a major victory that changed the whole game. It showed everyone, especially France, that the colonists had a real chance at winning. And with France's help, the colonists got stronger and eventually won the war. So, Saratoga was a game-changer because it gave the colonists a big boost and brought in important allies to help them win.

Temperature= 0

**Top P=** 0

**User:** What was the turning point in the revolutionary war? Why is this the turning point?

Assistant: Hey there! The turning point in the Revolutionary War was the Battle of Saratoga in 1777. This was a big deal because it was the first major victory for the American colonists over the British army. It convinced other countries, like France, to help the Americans, which was a game-changer. It showed that the Americans could win and boosted their morale. So, Saratoga was a turning point because it shifted the momentum in favor of the colonists and helped them gain more support in their fight for independence.

**User:** I do not understand, could you please elaborate further?

Assistant: Sure thing! So, before the Battle of Saratoga, the American colonists were struggling in the Revolutionary War. They had lost a lot of battles and things were looking pretty tough for them. But then, at the Battle of Saratoga, the American troops, led by General Horatio Gates, defeated a big British army. This victory was super important because it showed everyone, both in America and in other countries, that the colonists had a real chance of winning the war.

After the Battle of Saratoga, France decided to help the Americans by sending troops, ships, and supplies. This was a big deal because France was a powerful country and having their support made a huge difference for the colonists. The victory at Saratoga also boosted the morale of the American troops and the colonists back home. They started to believe that they could actually win the war and gain their independence from Britain.

So, the Battle of Saratoga was a turning point because it changed the course of the war. It gave the Americans a much-needed win, brought in support from other countries, and lifted the spirits of everyone fighting for independence.

User: I do not understand, could you please elaborate further?

Assistant: Of course! Let's break it down a bit more. Before the Battle of Saratoga, the

American colonists were fighting against the British army in the Revolutionary War. The

colonists were the underdogs, meaning they were the ones with less power and resources

compared to the British.

At Saratoga, the American troops won a major battle against the British. This victory was a

big deal because it showed that the colonists could stand up to the powerful British army

and actually win. It was like a lightbulb moment for everyone involved - the Americans, the

British, and even other countries watching from afar.

Because of the win at Saratoga, France decided to help the Americans in their fight against

the British. France sent troops, ships, and supplies to support the colonists. This was a game-

changer because France was a strong and influential country, and having their support gave

the colonists a much-needed boost.

So, the Battle of Saratoga was a turning point in the Revolutionary War because it shifted the

momentum in favor of the colonists. It showed that they had a real chance of winning,

brought in important support from France, and lifted the spirits of everyone fighting for

American independence.

Temperature= 2

**Top P=** 0.5

**User:** What was the turning point in the revolutionary war? Why is this the turning point?

Assistant: Hey there! The turning point in the Revolutionary War was the Battle of Saratoga

in 1777. This was a big deal because it was the first major victory for the American colonists

over the British army. It boosted the colonists' morale and convinced other countries, like

France, to support the American cause. This battle showed that the Americans had a real

chance of winning the war.

**User:** I do not understand, could you please elaborate further?

**Assistant:** Sure thing! So, before the Battle of Saratoga, the American colonists were

struggling in the Revolutionary War. But when they won at Saratoga, it was like a big

confidence boost for them. The victory showed that they could beat the powerful British

army. This success also convinced France to help the Americans, which was a game-changer

because France had a strong military. So, the Battle of Saratoga was a turning point because

it shifted the momentum in favor of the American colonists and brought in important

support from other countries.

**User:** I do not understand, could you please elaborate further?

**Assistant:** Of course! Imagine you're playing a really tough video game and you keep losing.

Then, all of a sudden, you figure out a new strategy and start winning. That's kind of what

happened at the Battle of Saratoga during the Revolutionary War. The American colonists

were like the underdogs, but when they won this battle, it was like they found the key to

winning the game. Winning at Saratoga made them feel like they could actually beat the big,

powerful British army. And when France saw that the Americans were doing well, they

decided to help out too, which was a huge help. So, the Battle of Saratoga was a turning

point because it changed the course of the war and gave the colonists a much better chance

of winning.

Temperature= 2

**Top P=** 0

**User:** What was the turning point in the revolutionary war? Why is this the turning point?

Assistant: Hey there! The turning point in the Revolutionary War was the Battle of Saratoga

in 1777. This was a big deal because it was the first major victory for the American colonists

over the British army. It convinced France to officially join the Americans in their fight against

the British, which was a game-changer because France was a powerful ally with a strong

military. This battle boosted American morale and showed that the colonists had a real chance of winning the war.

User: I do not understand, could you please elaborate further?

Assistant: Sure thing! So, before the Battle of Saratoga, the American colonists were struggling in the Revolutionary War. But when they won at Saratoga, it was like a big lightbulb moment for everyone. The victory showed that the Americans could beat the British in a major battle. This success convinced France to help the Americans because they saw that the colonists had a real shot at winning. With France's support, the Americans got more troops, weapons, and supplies to keep fighting. This all happened because of the Battle of Saratoga, making it a turning point in the war.

User: I do not understand, could you please elaborate further?

Assistant: Of course! Think of it like this: before the Battle of Saratoga, the American colonists were like the underdogs in a big sports game against a really tough team (the British). But when they won at Saratoga, it was like scoring a touchdown in the last few seconds of the game. Everyone started to believe that the underdogs could actually win. This victory was so impressive that it convinced another really strong team (France) to join the underdogs' side. With France's help, the underdogs (the Americans) got a lot stronger and had a much better chance of winning the game (the Revolutionary War). So, the Battle of Saratoga was a turning point because it changed the course of the war and gave the Americans a real shot at independence.

# **Interesting finding:**

**Temperature = 0 & top p = 0.5:** With temperature 0 the model will always select the most probable token at each step. The top p = 0.5 indicates that the model will consider only the top 50% of the most likely tokens at each step, allowing for some degree of randomness while still maintaining a level of control over the generated responses. With these settings, you might get relatively conservative responses with some variability within the constraints of the top 50% most probable tokens.

**Temperature = 0 & top p = 0:** restricts the model's creativity and randomness. The model will always choose the most probable token at each step without considering any alternatives. This typically results in very predictable and deterministic responses that might lack diversity or creativity. However, for this case the answers for the follow-up questions are larger in size and this could indicate some unexpected behavior with the model's implementation.

In both scenarios, even though the temperature is set to 0, the top p parameter can still introduce some variability in the responses, albeit to a lesser extent than when it's set higher. However, with top p set to 0, the responses become more constrained and deterministic, regardless of the temperature setting.

# Temperature = 2 & top p = 0.5:

With temperature set to 2, you're instructing the model to be more creative and exploratory in its responses. This can lead to more varied and unexpected outputs.

Setting top p to 0.5 means that the model will consider only the top 50% of the most likely tokens at each step, introducing some level of randomness while still maintaining control over the generation process.

In this scenario, you might receive responses that are more diverse and creative, with some variability in the length and content of the answers. The model could explore different ideas and concepts related to the question and follow-up questions.

# Temperature = 2 & top p = 0:

With top p set to 0, the model will always select the most likely token at each step, severely limiting the variability and randomness in the responses.

However, with temperature set to 2, the model may still introduce some level of creativity and exploration despite the deterministic nature imposed by the top p parameter. In this scenario, the responses might be more focused and deterministic compared to the previous setting, but still potentially diverse and creative due to the higher temperature.

Instruction 3:

**Default settings** 

User: Recite the Bill of Rights

Assistant: Sure! The Bill of Rights includes the first 10 amendments to the United States

Constitution. They are:

1. Freedom of religion, speech, press, assembly, and petition.

2. Right to bear arms.

3. Protection against quartering of soldiers.

4. Protection against unreasonable searches and seizures.

5. Rights of the accused.

6. Right to a fair and speedy trial.

7. Right to a trial by jury.

8. Protection against cruel and unusual punishment.

9. Rights retained by the people.

10. Powers not delegated to the federal government are reserved for the states or the

people.

Maximum length: 150

User: Recite the Bill of Rights

**Assistant:** Sure thing! The Bill of Rights is the first ten amendments to the U.S. Constitution.

They include things like freedom of speech, religion, and the press, the right to bear arms,

and protections against unfair trials. They're really important because they protect our

individual rights and freedoms.

Maximum length: 75

User: Recite the Bill of Rights

**Assistant:** The Bill of Rights is the first 10 amendments to the United States Constitution.

They were added to protect individual freedoms like freedom of speech, religion, and the

right to a fair trial. It's like a list of rules to make sure the government doesn't take away our

rights.

Maximum length: 10

**User:** Recite the Bill of Rights

**Assistant:** Sure! The Bill of Rights is the first ten

Maximum length: 0

It is not allowed to enter this value. Effective range 1-4096 for GPT 3.5-turbo

**Interesting finding:** 

Maximum length 150: the model will generate responses that are up to 150 tokens in

length. This allows for relatively detailed and thorough responses to your questions, giving

the model more room to provide context, explanations, or additional information.

**Maximum length 75:** shorter responses compared to the previous setting. The responses

will still aim to convey relevant information, but they may be more concise and focused.

Maximum length 10: the model can't provide the complete answer since it runs out of

tokens.

Maximum length 0: It's not allowed. Effective range 1-4096 for GPT 3.5-turbo.

Instruction 4:

Maximum length: 150

Frequency penalty: 1

**User:** Recite the Bill of Rights

Assistant:

Sure! The Bill of Rights is the first 10 amendments to the United States Constitution. They

were added to protect people's individual rights and freedoms. Here they are:

1. Freedom of speech, religion, press, assembly, and petition.

2. Right to bear arms.

3. Protection from quartering of troops.

4. Protection from unreasonable searches and seizures.

5. Right to due process of law, protection from self-incrimination, double jeopardy.

6. Right to a fair and speedy trial by jury.

7. Right to trial by jury in civil cases.

8. Protection from cruel and unusual punishment, excessive bail or fines.

9. There are other rights that people have that are not specifically listed in the Constitution

10.R

Maximum length: 75

Frequency penalty: 1

User: Recite the Bill of Rights

Assistant: Sure, the Bill of Rights is the first 10 amendments to the United States

Constitution. It includes important rights like freedom of speech, religion, and the right to a

fair trial. It was added to the Constitution in 1791 to protect individual liberties from

government interference.

Maximum length: 10

Frequency penalty: 1

**User:** Recite the Bill of Rights

**Assistant:** Sure! The Bill of Rights is the first

Maximum length: 0

Frequency penalty: 1

Maximum length = 0 is not allowed in GPT-3.5- turbo.

Maximum length: 150

Frequency penalty: 2

**User:** Recite the Bill of Rights

Assistant: Sure! The Bill of Rights is the first 10 amendments to the United States

Constitution. They include things like freedom of speech, religion, and the press; the right to

bear arms; protections against unreasonable search and seizure; rights for people accused of

crimes, like a fair trial and not having to testify against yourself; protections from cruel and

unusual punishment or excessive fines or bail. These rights are important because they help

protect our freedoms as American citizens.

Maximum length: 75

Frequency penalty: 2

**User:** Recite the Bill of Rights

**Assistant:** Sure! The Bill of Rights is the first 10 Amendments to the United States

Constitution. They list some important rights that all Americans have. Here they are:

1. Freedom of speech, religion, press, assembly, and petition

2. Right to bear arms

3. Protection from quartering troops in homes

4. Protection from unreasonable searches and seizures

5.

Maximum length: 10

Frequency penalty: 2

**User:** Recite the Bill of Rights

**Assistant:** The Bill of Rights is the first 10 amendments

Maximum length: 0

Frequency penalty: 2

Maximum length = 0 is not allowed in GPT-3.5- turbo.

**Interesting finding:** 

Maximum length = 150 and frequency penalty = 1: The model will generate responses with

a maximum length of 150 tokens. The model will avoid repeating the same or similar phrases

(frequency penalty =1). The assistant will not manage to return the 10<sup>th</sup> amendment.

Maximum length = 75 and frequency penalty = 1: The model will generate responses with a

maximum length of 75 tokens. The model will avoid repeating the same or similar phrases

(frequency penalty =1). The response is more concise and focused without unnecessary

repetition.

Maximum length = 10 and frequency penalty = 1: The model runs out of tokens.

Maximum length = 150 and frequency penalty = 2: the model will be more aggressive in

avoiding repetition, even if it sacrifices coherence or relevance. However, since the answer

concerns a complex topic, the model repeats some words like "protections" (twice), "rights"

(three times), "like" (twice).

Maximum length = 75 and frequency penalty = 2: The model runs out of tokens

Maximum length = 10 and frequency penalty = 2: The model runs out of tokens.

Instruction 5:

Maximum length: 150

Presence penalty: 1

**User:** Recite the Bill of Rights

Assistant: Hey there! The Bill of Rights is the first 10 amendments to the United States

Constitution. It includes important things like freedom of speech, religion, and the right to a

fair trial. If you want to recite them, it goes like this:

1. Freedom of speech, religion, and the press

2. Right to bear arms

3. Protection from quartering troops in your home

4. Protection from unreasonable searches and seizures

5. Right to due process of law, protection from self-incrimination

6. Right to a fair and speedy trial

7. Right to a trial by jury in civil cases

8. Protection from cruel and unusual punishment

9. Rights not listed in the Constitution belong to the people

Maximum length: 75

Presence penalty: 1

User: Recite the Bill of Rights

**Assistant:** Sure! The Bill of Rights is the first 10 amendments to the United States

Constitution. They include important rights like freedom of speech, religion, and the right to

a fair trial. Would you like me to explain each one in more detail?

Maximum length: 10

Presence penalty: 1

**User:** Recite the Bill of Rights

**Assistant:** Sure! The Bill of Rights is the first

Maximum length: 0

Presence penalty: 1

Maximum length = 0 is not allowed in GPT-3.5- turbo.

Maximum length: 150

Presence penalty: 2

**User:** Recite the Bill of Rights

**Assistant:** Sure! The Bill of Rights is the first 10 amendments to the United States

Constitution. They include important rights like freedom of speech, religion, and the right to

a fair trial. Do you want me to explain any specific amendment in more detail?

Maximum length: 75

**Presence penalty: 2** 

**User:** Recite the Bill of Rights

**Assistant:** Sure, the Bill of Rights is the first 10 amendments to the United States

Constitution. They were added to protect individual freedoms and limit the power of the

government. Some key rights include freedom of speech, religion, and the press; the right to

bear arms; protection against unreasonable searches and seizures; the right to a fair trial;

and protection from cruel and unusual punishment.

Maximum length: 10

Presence penalty: 2

User: Recite the Bill of Rights

**Assistant:** Sure! The Bill of Rights are the first

**Interesting finding:** 

answer to the question.

The matter of tokens length has already been discussed. With presence penalty 2 the assistant will try not to repeat itself. But with maximum length 150 tokens the answer is relatively simple and not sufficient. Also, with maximum length 75 tokens the answer is larger in size with different syntax and tone. With presence penalty 1 the assistant will seek to vary its response but for the answer with maximum length 150 tokens does not manage to return all the amendments. The answer for question with maximum length 75 tokens is similar to the answer with maximum length 150 for presence penalty 2. The settings primarily affect how much detail is provided and how varied the responses are in terms of presentation and exploration of related topics, rather than changing the fundamental