

faqs = ""In ancient Greek religion and mythology, the twelve Olympians are the major deities of the Greek pantheon, commonly considered t
They were called Olympians because, according to tradition, they resided on Mount Olympus.
Besides the twelve Olympians, there were many other cultic groupings of twelve gods.
The Olympians were a race of deities, primarily consisting of a third and fourth generation of immortal beings, worshipped as the princip
because of their residency atop Mount Olympus. They gained their supremacy in a ten-year-long war of gods, in which Zeus led his siblings
of ruling immortal beings, the Titans, children of the primordial deities Gaia and Uranus. They were a family of gods, the most important
Olympians, offspring of the Titans Cronus and Rhea: Zeus, Poseidon, Hera, Demeter and Hestia, along with the principal offspring of Zeus:
Hephaestus, Hermes and Dionysus.
Although Hades was a major deity in the Greek pantheon and was the brother of Zeus and the other first generation of Olympians,
his realm was far away from Olympus in the underworld, and thus he was not usually considered to be one of the Olympians.

King of the gods and ruler of Mount Olympus; god of the sky, lightning, thunder, law, order and justice.
The youngest child of the Titans Cronus and Rhea. Brother and husband of Hera and brother of Poseidon, Hades, Demeter, and Hestia.
He had many affairs with goddesses and mortals, such as his sister Demeter and Leto, mortals Leda and Alcmena, and more. His symbols incl
, eagle, oak tree, bull, scepter, and scales. With the assistance of Hades and Poseidon, Zeus overthrew his father, Cronus, king of the Ti
In addition to controlling the weather, Zeus was noted for his chronic infidelity to his sister-wife, Hera.
Among the results of his weakness for comely mortal women was Helen of Troy. His Roman equivalent was Jupiter.

Poseidon is best known as the Greek sea god, but he was also the god of horses and of earthquakes. (Thus, many of his temples were inland
Though humanoid, he fathered both the winged horse Pegasus (by Medusa, no less) and the Cyclops Polyphemus, who is blinded by Odysseus a
God of the seas, water, storms, hurricanes, earthquakes and horses.
The middle son of Cronus and Rhea. Brother of Zeus and Hades. Married to the Nereid Amphitrite; although, as with many of the male Greek
His symbols include the trident, horse, bull, and dolphin.

Like many gods in the Greek pantheon, Hermes presided over multiple spheres. He was a pastoral figure, responsible for protecting livesto
and was also associated with fertility, music, luck, and deception. In the Odyssey, he is depicted as a messenger god. His Roman equival
Messenger of the gods; god of travel, commerce, communication, borders, eloquence, diplomacy, thieves, and games. He was also the guide
The son of Zeus and the nymph Maia. The second-youngest Olympian, just older than Dionysus.
His symbols include the caduceus (staff entwined with two snakes), winged sandals and cap, stork, and tortoise (whose shell he used to in

The queen goddess of Olympus, Hera was both sister and wife to Zeus. Though she is often depicted as reserved and austere, she was mercil
Unfortunately for the objects of Zeus's godly affections, Hera tended to torment the "other women" (and their offspring, including Herac
Her Roman equivalent was Juno. Queen of the gods and the goddess of marriage, women, childbirth and family.
The youngest daughter of Cronus and Rhea. Sister and wife of Zeus. Being the goddess of marriage, she frequently tried to get revenge on
Her symbols include the peacock, cuckoo, and cow.

Hades ruled the world of the dead, with which he was sometimes synonymous. The chilly lord of the underworld was among the few Greek gods
He was not the ultimate judge of the souls that wandered his domain nor did he mete out their punishments for sins committed during their
he tricked Persephone into eating enchanted pomegranate seeds so that she would have to remain with him for a portion of the year. He was

Dionysus was a son of Zeus born to a mortal mother. When Zeus accidentally killed her, he sewed the young Dionysus into his thigh and, wh
The cult of Dionysus revolved around intoxication, sex, and savage ritual sacrifice. He was often symbolized by a bull due to his associa
Elements of his character are seen in the Roman god of wine, Bacchus. God of wine, the grapevine, fertility, festivity, ecstasy, madness
The son of Zeus and the mortal Theban princess Semele. Married to the Cretan princess Ariadne. The youngest Olympian god, as well as the
His symbols include the grapevine, ivy, cup, tiger, panther, leopard, dolphin, goat, and pinecone.

Demeter, an agricultural goddess, was mother to Persephone, who was abducted by the underworld god Hades to be his bride. While searching
The Eleusinian Mysteries, perhaps the most important religious rites in ancient Greece, are attributed to her teachings. Her Roman equiva

The twin brother of Artemis, Apollo was among the most important (read: feared) of the gods. Son of Zeus, he disseminated the will of his
The Oracle at Delphi was his mouthpiece; a 2001 study determined that the oracle was likely hallucinating due to ethylene gas rising fro

Ares was the god of bloodlust. (His half-sister Athena represented the more "noble" aspects of combat and civil conduct during war.) Thou
er, donating some prisoners of war to his worship. And sacrificing dogs...yeah, that's right, Ares liked dead puppies. Jerk. His Roman equ

Artemis was the fleet-footed goddess of the hunt.
Often depicted in painting and sculpture with a deer or a hunting dog, she was both huntress and protectress of the living world. Her R
Goddess of the hunt, the wilderness, virginity, the Moon, archery, childbirth, protection and plague.
The daughter of Zeus and Leto, and the twin sister of Apollo.
Her symbols include the Moon, horse, deer, hound, she-bear, snake, cypress tree, and bow and arrow.

Athena was the goddess of reason, wisdom, and war. She famously sprung fully formed from the forehead of Zeus.
A major figure in the Odyssey, in which she instructed Odysseus, she also guided Perseus and Heracles through their trials.
The Parthenon was her chief temple in Athens, which is named in her honor. Her Roman equivalent was Minerva.
Goddess of wisdom, handicraft, and warfare.[28]
The daughter of Zeus and the Oceanid Metis, she rose from her father's head fully grown and in full battle armor.
Her symbols include the owl and the olive tree.

Aphrodite was the goddess of love, and beauty. Unsurprisingly for a love goddess, she was said to have emerged from the foam generated wh
Uranus, were thrown into the sea by his son, the Titan Cronus. (Or is that surprising?) Kind of makes Botticelli's surreally lovely Birt
counterpart emerging from the waves—a little more visceral, doesn't it?
Goddess of love, pleasure, passion, procreation, fertility, beauty and desire.
The daughter of Zeus and the Oceanid or Titaness Dione, or perhaps born from the sea foam after Uranus' blood dripped into the sea after
Her symbols include the dove, bird, apple, bee, swan, myrtle, and rose.

Hephaestus was a Master blacksmith and craftsman of the gods; god of the forge, craftsmanship, invention, fire and volcanoes.
The son of Hera, either by Zeus or through parthenogenesis. Married to Aphrodite. His Latin name, Vulcan, gave us the word "volcano".
His symbols include fire, anvil, axe, donkey, hammer, tongs, and quail.
""

```
import tensorflow as tf
from tensorflow.keras.preprocessing.text import Tokenizer

tokenizer = Tokenizer()

tokenizer.fit_on_texts([faqs])

len(tokenizer.word_index)

590

input_sequences = []
for sentence in faqs.split('\n'):
    tokenized_sentence = tokenizer.texts_to_sequences([sentence])[0]

    for i in range(1, len(tokenized_sentence)):
        input_sequences.append(tokenized_sentence[:i+1])
```

```
input_sequences
```

```
.,
180,
1,
68,
26,
69,
1,
70,
50,
2,
1,
21,
38,
181,
105,
6,
71,
7,
39,
27,
40,
51,
52,
53,
54],
[10,
104,
21,
179,
3,
180,
1,
68,
26,
69,
1,
70,
50,
2,
1,
21,
38,
181,
105,
6,
71,
7,
39,
27,
40,
51,
52,
53,
54,
41],
[10,
104,
21,
179,
```

```
max_len = max([len(x) for x in input_sequences])
```

```
from tensorflow.keras.preprocessing.sequence import pad_sequences
padded_input_sequences = pad_sequences(input_sequences, maxlen = max_len, padding='pre')
```

```
padded_input_sequences

array([[ 0,  0,  0, ...,  0, 10, 104],
       [ 0,  0,  0, ..., 10, 104, 21],
       [ 0,  0,  0, ..., 104, 21, 179],
       ...,
       [ 0,  0,  0, ..., 587, 588, 589],
       [ 0,  0,  0, ..., 588, 589,  3],
       [ 0,  0,  0, ..., 589,  3, 590]], dtype=int32)
```

```
X = padded_input_sequences[:, :-1]
```

```
y = padded_input_sequences[:, -1]
```

```
X.shape

(1444, 70)
```

```
y.shape

(1444,)
```

```
from tensorflow.keras.utils import to_categorical
y = to_categorical(y,num_classes=591)
```

```
y.shape

(1444, 591)
```

```
from tensorflow.keras.models import Sequential
from tensorflow.keras.layers import Embedding, LSTM, Dense
```

```
model = Sequential()
model.add(Embedding(591, 100, input_length=70))
model.add(LSTM(150))
model.add(Dense(591, activation='softmax'))
```

```
model.compile(loss='categorical_crossentropy', optimizer='adam',metrics=['accuracy'])
```

```
model.summary()
```

Model: "sequential_5"

Layer (type)	Output Shape	Param #
embedding_5 (Embedding)	(None, 70, 100)	59100
lstm_9 (LSTM)	(None, 150)	150600
dense (Dense)	(None, 591)	89241

=====

Total params: 298941 (1.14 MB)

Trainable params: 298941 (1.14 MB)

Non-trainable params: 0 (0.00 Byte)

=====

```
model.fit(X,y,epochs=100)
```

Epoch 1/100

46/46 [=====] - 8s 113ms/step - loss: 5.9895 - accuracy: 0.0644

Epoch 2/100

46/46 [=====] - 6s 140ms/step - loss: 5.5741 - accuracy: 0.0803

Epoch 3/100

46/46 [=====] - 5s 113ms/step - loss: 5.4826 - accuracy: 0.0831

Epoch 4/100

46/46 [=====] - 6s 140ms/step - loss: 5.3949 - accuracy: 0.0817

Epoch 5/100

46/46 [=====] - 5s 114ms/step - loss: 5.2888 - accuracy: 0.1163

Epoch 6/100

46/46 [=====] - 6s 141ms/step - loss: 5.1702 - accuracy: 0.1274

Epoch 7/100

46/46 [=====] - 5s 113ms/step - loss: 5.0255 - accuracy: 0.1385

Epoch 8/100

46/46 [=====] - 6s 140ms/step - loss: 4.8491 - accuracy: 0.1690

```

Epoch 9/100
46/46 [=====] - 5s 114ms/step - loss: 4.6381 - accuracy: 0.2064
Epoch 10/100
46/46 [=====] - 6s 124ms/step - loss: 4.4115 - accuracy: 0.2244
Epoch 11/100
46/46 [=====] - 6s 127ms/step - loss: 4.1905 - accuracy: 0.2327
Epoch 12/100
46/46 [=====] - 5s 113ms/step - loss: 3.9748 - accuracy: 0.2521
Epoch 13/100
46/46 [=====] - 6s 140ms/step - loss: 3.7621 - accuracy: 0.2694
Epoch 14/100
46/46 [=====] - 5s 113ms/step - loss: 3.5784 - accuracy: 0.2909
Epoch 15/100
46/46 [=====] - 6s 139ms/step - loss: 3.3943 - accuracy: 0.3123
Epoch 16/100
46/46 [=====] - 5s 113ms/step - loss: 3.2088 - accuracy: 0.3324
Epoch 17/100
46/46 [=====] - 6s 139ms/step - loss: 3.0419 - accuracy: 0.3490
Epoch 18/100
46/46 [=====] - 5s 113ms/step - loss: 2.8740 - accuracy: 0.3857
Epoch 19/100
46/46 [=====] - 6s 140ms/step - loss: 2.7117 - accuracy: 0.4197
Epoch 20/100
46/46 [=====] - 5s 113ms/step - loss: 2.5517 - accuracy: 0.4488
Epoch 21/100
46/46 [=====] - 6s 137ms/step - loss: 2.3969 - accuracy: 0.5062
Epoch 22/100
46/46 [=====] - 5s 112ms/step - loss: 2.2412 - accuracy: 0.5443
Epoch 23/100
46/46 [=====] - 5s 115ms/step - loss: 2.0963 - accuracy: 0.5942
Epoch 24/100
46/46 [=====] - 6s 132ms/step - loss: 1.9535 - accuracy: 0.6281
Epoch 25/100
46/46 [=====] - 5s 111ms/step - loss: 1.8243 - accuracy: 0.6620
Epoch 26/100
46/46 [=====] - 6s 138ms/step - loss: 1.6966 - accuracy: 0.7001
Epoch 27/100
46/46 [=====] - 5s 111ms/step - loss: 1.5810 - accuracy: 0.7299
Epoch 28/100
46/46 [=====] - 6s 139ms/step - loss: 1.4669 - accuracy: 0.7618
Epoch 29/100
46/46 [=====] - 5s 110ms/step - loss: 1.3637 - accuracy: 0.7895

```

```
import time
```

```
text = "Ares was the god of "
```

```

for i in range(10):
    # tokenize
    token_text = tokenizer.texts_to_sequences([text])[0]
    # padding
    padded_token_text = pad_sequences([token_text], maxlen=70, padding='pre')
    # predict
    pos = np.argmax(model.predict(padded_token_text))

```

```

for word,index in tokenizer.word_index.items():
    if index == pos:
        text = text + " " + word
        print(text)
        time.sleep(2)

```

```

1/1 [=====] - 0s 56ms/step
Ares was the god of bloodlust
1/1 [=====] - 0s 31ms/step
Ares was the god of bloodlust his
1/1 [=====] - 0s 33ms/step
Ares was the god of bloodlust his half
1/1 [=====] - 0s 32ms/step
Ares was the god of bloodlust his half sister
1/1 [=====] - 0s 32ms/step
Ares was the god of bloodlust his half sister athena
1/1 [=====] - 0s 54ms/step
Ares was the god of bloodlust his half sister athena represented
1/1 [=====] - 0s 33ms/step
Ares was the god of bloodlust his half sister athena represented the
1/1 [=====] - 0s 34ms/step
Ares was the god of bloodlust his half sister athena represented the more
1/1 [=====] - 0s 32ms/step
Ares was the god of bloodlust his half sister athena represented the more noble
1/1 [=====] - 0s 32ms/step
Ares was the god of bloodlust his half sister athena represented the more noble aspects

```

