```
1 import pytest
 2 from classes_def import Text, Sent, LexEntry
 3
 4 def test_sentences():
       text = Text("Hello, this is an example text. It
   has multiple sentences.")
       sentences = text.split_into_sent()
6
7
       sent = Sent(sentences)
8
       print("Sentences:")
9
       for i in range(len(sentences)):
10
11
           try:
12
               print(f"Sentence {i}: {sent.get_sentence(
   i)}")
13
           except IndexError as e:
14
               print(e)
15
16
       assert sentences == ["Hello, this is an example"
   text.",
17
                             "It has multiple sentences."
   ], f"Expected sentences did not match: {sentences}"
18
19
20 def test_lex_entries():
21
       text = Text("Hello, this is an example text. It
   has multiple sentences.")
22
       sentences = text.split_into_sent()
23
       sent_chunk = Sent(sentences)
24
       for sentence in sentences:
25
           lex_entry = LexEntry(sentence)
           words = lex_entry.split_into_words()
26
           print(f"\nWords in '{sentence}':")
27
28
           for word in words:
               print(f"Word: {word}, Length: {len(word)}
29
   , Index: {lex_entry.get_word_index(word)}")
30
31
       first_sentence_lex = LexEntry(sentences[0])
32
       assert first_sentence_lex.split_into_words() == [
   "hello", "this", "is", "an", "example",
33
   "text"], f"Expected words did not match: {
```

```
33 first_sentence_lex.split_into_words()}"
34
35
       second_sentence_lex = LexEntry(sentences[1])
36
       assert second_sentence_lex.split_into_words
   () == ["it", "has", "multiple",
37
    "sentences"], f"Expected words did not match: {
   second_sentence_lex.split_into_words()}"
38
39 def test_lemma():
       text = Text("Hello, this is an example text. It
40
   has multiple sentences.")
41
       sentences = text.split_into_sent()
42
       sent = Sent(sentences)
43
44
       for sentence in sentences:
45
           lex_entry = LexEntry(sentence)
46
           words = lex_entry.split_into_words()
47
           for word in words:
48
49
               pos = lex_entry.get_pos(word)
50
               lemma = lex_entry.lemmatize_word(word)
51
52
               # Print or assert as needed for testing
               print(f"Word: {word}, POS: {pos}, Lemma:
53
   {lemma}")
54
55
               # Example assertion (adjust as needed
  based on your expected outcomes)
56
               # This example assumes that 'example'
   should be lemmatized to 'example'
               if word == 'example':
57
                   assert lemma == 'example', f"Expected
58
    'example', but got '{lemma}'"
               elif word == 'has':
59
60
                   assert lemma == 'have', f"Expected '
   have', but got '{lemma}'"
61
62 if __name__ == "__main__":
63
       pytest.main()
```