

How can I read a text file into a list in Python? Can you provide some examples?

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To read a text file into a list in Python, you can use the "readlines()" function. This function reads each line of the text file and stores it as an element in a list. This list can then be used for further manipulation and processing of the data. Here are a few examples of how to use this function:

Example 1:

```
file = open("textfile.txt", "r")
content_list = file.readlines()
print(content_list)
```

This will open the text file named "textfile.txt" in read mode and store each line of the file as an element in the "content_list" list. The list will then be printed, displaying all the lines of the text file.

Example 2:

```
with open("textfile.txt", "r") as file:
content_list = file.readlines()
print(content_list)
```

Using the "with" statement ensures that the file is properly closed after reading. The rest of the code is similar to the first example.

Example 3:

```
file = open("textfile.txt", "r")
content_list =
print(content_list)
```

This example uses list comprehension to remove any trailing whitespace from each line before adding it to the list. This can be useful when dealing with text files containing strings or numbers.

In summary, the "readlines()" function is a convenient way to read a text file into a list in Python and provides flexibility in processing and manipulating the data.

Read Text File Into List in Python (With Examples)

You can use one of the following two methods to read a text file into a list in Python:

Method 1: Use open()

```
#define text file to open  
my_file = open('my_data.txt', 'r')  
  
#read text file into list  
data = my_file.read()
```

Method 2: Use loadtxt()

```
from numpy import loadtxt  
  
#read text file into NumPy array  
data = loadtxt('my_data.txt')
```

The following examples shows how to use each method in practice.

Example 1: Read Text File Into List Using open()

The following code shows how to use the open() function to read a text file called my_data.txt into a list in Python:

```
#define text file to open  
my_file = open('my_data.txt', 'r')  
  
#read text file into list
```

```
data = my_file.read()  
  
#display content of text file  
print(data)
```

```
4  
6  
6  
8  
9  
12  
16  
17  
19
```

Example 2: Read Text File Into List Using loadtxt()

The following code shows how to use the NumPy loadtxt() function to read a text file called my_data.txt into a NumPy array:

```
from numpy import loadtxt  
  
#import text file into NumPy array  
data = loadtxt('my_data.txt')
```

```
#display content of text file  
print(data)
```

```
#display data type of NumPy array  
print(data.dtype)
```

```
float64
```

The nice thing about using `loadtxt()` is that we can specify the data type when importing the text file by using the `dtype` argument.

For example, we could specify the text file to be imported into a NumPy array as an integer:

```
from numpy import loadtxt
```

```
#import text file into NumPy array as integer  
data = loadtxt('my_data.txt', dtype='int')
```

```
#display content of text file  
print(data)
```

```
#display data type of NumPy array  
print(data.dtype)
```

int64

Note: You can find the complete documentation for the `loadtxt()` function .

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