

READING AND WRITING A FILE

There are two methods to access the data in the file.

1. read()
2. write()

1. read() Method

This method reads a string from an open file.

Syntax:

```
file_object.read([count])
```

- Here passed parameter is a number of bytes to be read from the opened file.

For Example if the file have the content,

sample.txt – Problem Solving and Python Programming.

Example Program

```
f=open("F:/Python/sample.txt","r")
str1=f.read(10)
str2=f.read(20)
str3=f.read(30)
print("Read string is :",str1)
print("Read string is :",str2)
print("Read string is :",str3)
f.close()
```

Output

Read string is : Problem So

Read string is : lving and Python Pro

Read string is : gramming

2. write() Method

This method writes a string from an open file.

Syntax:

```
file_object.write("String")
```

Example:

```
f=open("F:/Python/test.txt","w+")
print(f.write("This is my first file"))
print(f.read())
f.close()
```

Output:

This is my first file

WORKING WITH TEXT FILES**1) readline() method**

There are two functions to read a file line by line, then there are two methods

- readline()
- readlines()

1.readline()

Every time a user runs the method, it will return a string of characters that contains a single line of information from the file.

Syntax: `file_object.readline()`

Example

Consider the file test.txt contain these three lines

This is the First Line in the file

This is the Second Line in the file

This is the Third Line in the file

Now the Python source code is

```
f=open("F:/Python/test.txt","r")
print(f.readline())
f.close()
```

Output:

This is the First Line in the file

2. readlines() method

This method is used to return a list containing all the lines separated by the special character (\n).

Syntax:

`file_object.readlines()`

Example

Consider the same file

Now the Python source code is

```
f=open("F:/Python/test.txt","r")
print(f.readlines())
f.close()
```

Output

['This is the First Line in the file\n', 'This is the Second Line in the file\n', 'This is the Third Line in the file']

LOOPING OVER THE FILE

(i) Write a python program to read a file without using read() function.

```
f=open("test.txt","r")
for line in f:
    print(line)
f.close()
```

Output:

```
This is the First Line in the file
This is the Second Line in the file
This is the Third Line in the file
```

(ii) Write a python program to access a file using with statement.

Syntax:

```
with open("filename") as file:
```

Example:

```
with open("test.txt") as f:
for line in f:
    print(line)
```

Output:

```
This is the First Line in the file
This is the Second Line in the file
This is the Third Line in the file
```