

Reading and writing files

Python provides read () and write () methods to read and write files through file object respectively.

Reading files:

The read() method read the file contents, from opened file. To read the content of file, the file must be opened in read mode (r). There are 4 methods for reading files.

- i) Reading a file using read(size) method
- ii) Reading a file using for loop
- iii) Reading a file using readline() method
- iv) Reading a file using

readlines() method
The file test.txt contains

problem solving and python programming.

Introduction to python

i) Reading a file using read(size) method

The read(size) method is used to read in size number of data. If the size parameter is not specified, it reads and returns up to the end of file.

Syntax:

```
fileobject . read([size])
```

Example:

```
f=open("test.txt", "r+")
S=f.read(15);
print("Read string is:",S)
f.close()
```

Output:

Read string is: problem solving

ii) Reading a file using for loop

A file can be read using for loop. This method is efficient and fast.

Syntax:

for loopvariable in fileobject:

```
print(loopvariable)
```

Example Program:

```
f=open("test.txt", "r+")
```

```
for i in f:
```

```
print(i)
```

```
f.close()
```

Output:

Problem solving and python programming

Introduction to python

iii) Reading a file using readline() method

The readline() method is used to read individual line of a file. It reads a file till thenewline(\n) character is reached (or) end of file is reached.

Syntax:

```
fileobject . readline()
```

Example Program:

```
f=open("test.txt", "r+")
```

```
f.readline()
```

```
f.close()
```

Output:

Problem solving and python programming

iv) Reading a file using readlines() method

The readlines() method is used to read all the lines of file at a time.

Syntax:

```
fileobject.readlines()
```

Example Program:

```
f=open("test.txt", "r+")
```

```
f.readlines()
```

```
f.close()
```

Output:

Problem solving and python programming

Introduction to python

Writing files:

The write() method is used to write the contents into the file. To write the file contents, the file must be opened into following mode.

w-writing mode

a-appending mode

x-exclusive creation

The 'w' mode will overwrite into the file if already exists. So all previous data's are erased.

Syntax:

```
fileobject . write(string)
```

Example Program:

```
f=open("test.txt", "r+")
```

```
f.write("Welcome to python")
```

```
f.close()
```