

SESSION 2020-21
Class XII
Computer Science(083)
(CH-4 FILE HANDLING)
Topic : Working with Text Files
HANDOUT

Name : _____



Working with Text Files:

It means to explore various functions for working with text files.

It include :

- **Reading from Text File: Python provide mainly three types of read from a text or data file. They are :**

a) The read () Method :

It reads the entire file and returns its contents in the form of a string. Reads at most size bytes or less if end of file occurs and if size not mentioned then read the entire file contents.

e.g.: write () and read () Method based program:

```
f = open("a.txt", 'w')
line1 = 'Welcome to class12-Computer science'
f.write(line1)
line2="\nRegularly class12-Computer science "
f.write(line2)
f.close()
f = open("a.txt", 'r')
text = f.read()
print(text)
f.close()
```

OUTPUT

Welcome to **class12-Computer science**

b) readline([size]) method: Read no of characters from file if size is mentioned or readline till new line character or returns empty string on EOF.

e.g. program

```
f = open("a.txt", 'w')
line1 = 'Welcome to class12-Computer science '
f.write(line1)
line2="\n Regularly class12-Computer science "
f.write(line2)
f.close()
f = open("a.txt", 'r')
text = f.readline()
```

```
print(text)
text = f.readline()
print(text)
f.close()
```

OUTPUT

Welcome to class12-Computer science

c) readlines([size]) method: Read no of lines from file if size is mentioned or all contents if size is not mentioned.

e.g.program

```
f = open("a.txt", 'w')
line1 = 'Welcome to class12-Computer science '
f.write(line1)
line2="\n Regularly class12-Computer science "
f.write(line2)
f.close()
f = open("a.txt", 'r')
text = f.readlines(1)
print(text)
f.close()
```

OUTPUT

```
['Welcome to class12-Computer science \n']
```

NOTE –READ ONLY ONE LINE IN ABOVE PROGRAM as the argument is 1.

- **Writing onto Text File:**

It means to add content or data onto the text file, by using two types of functions. They are :

a) The write() Method:

It writes the contents to the file in the form of string. It does not return value. Due to buffering, the string may not actually show up in the file until the flush() or close() method is called.

Iterating over lines in a file:

```
e.g.program
f = open("a.txt", 'w')
line1 = 'Welcome to class12-Computer science
f.write(line1)
line2="\nRegularlyvisit python.mykvs.in"
f.write(line2)
f.close()
f = open("a.txt", 'r')
for text in f.readlines():
print(text)
f.close()
```

Processing Every Word in a File :

e.g.program

```
f = open("a.txt", 'w')
```

```
line1 = 'Welcome to class12-Computer science'  
f.write(line1)  
line2="\nRegularly visit class12-Computer science "  
f.write(line2)  
f.close()  
f = open("a.txt", 'r')  
for text in f.readlines():  
for word in text.split( ):  
print(word)  
f.close()
```

OUTPUT

```
Welcome  
to  
class12-Computer science  
Regularly  
visit  
class12-Computer science
```

Append content to a File :

```
f = open("a.txt", 'w')  
line = 'Welcome to class12-Computer science \n Regularly visit class12-Computer science'  
f.write(line)  
f.close()  
f = open("a.txt", 'a+')  
f.write("\nthanks")  
f.close()  
f = open("a.txt", 'r')  
text = f.read()  
print(text)  
f.close()
```

```
OUTPUT :Welcome to class12-Computer science  
Regularly visit class12-Computer science  
Thanks
```

b) writelines() : it writes all strings in list L as lines to text file referenced by file object.