File Handling in Python

File Handling in Python

Open and close a file in Python

- Opening a file refers to getting the file ready either for reading or for writing.
- This can be done using the open() function.
- This function returns a file object and takes two arguments, one that accepts the file name and another that accepts the mode (Access Mode).

```
# open the file using open() function
file = open("sample.txt", 'a')
```

Python has a close() method to close a file.

```
# closing the file
file.close()
```

File Handling in Python

File access Mode

Mode	Function
r	*Read Only*
r+	*Read and Write*
w	*Write Only*
w+	*Write and Read*
a	*Append Only*
a+	*Append and Read*

File Handling in Python

Reading from a file and writing in a file

```
# Reading from file
print(file.read())


# Add content in the file
file.write(" RCCIIT College, Kolkata")
```

Import module in Python

Import module in Python

- Import in python is similar to #include header_file in C/C++.
- Python modules can get access to code from another module by importing the file/function using import.

```
import math
print(math.pi)
```

Rather than importing the whole module.

```
from math import pi
print(pi)
```

Here math is not imported, rather just pi has been imported as a variable.

All the functions and constants can be imported using *.

```
from math import *
print(pi)
```

Package in Python

- A package can contain one or more relevant modules.
- A package is actually a folder containing one or more module files.

File name: functions.py

```
def sum(x,y):
    return x+y

def average(x,y):
    return (x+y)/2

def power(x,y):
    return x**y
```

Python Random Module

Python Random module is an in-built module of Python which is used to generate random numbers.

```
import random

# prints a random value from the list
list1 = [1, 2, 3, 4, 5, 6]
print(random.choice(list1))

#Generate random integers between 0.0 to 1.0
import random
random.random()

from random import random
print(random())
```

THANK YOU