**1)Which function is used to open a file ? What are the different modes of opening a file?**

**Explain each mode of file opening**.

Ans- open() method

R - Open a file for reading. (default)

w- Open a file for writing. Creates a new file if it does not exist or truncates the file if it exists.

x- Open a file for exclusive creation. If the file already exists, the operation fails.

1. Open a file for appending at the end of the file without truncating it. Creates a new file if it does not exist.

t- Open in text mode. (default)

1. Open in binary mode.

+ - Open a file for updating (reading and writing)

**2)Why close() function is used? Why is it important to close a file?**

Ans- The close() method closes an open file.

You should always close your files, in some cases, due to buffering, changes made to a file may not show until you close the file.

**3)Write a python program to create a text file. Write ‘I want to become a data scientist’ in that file. Then close the file. Open this file and red the content of the file.**

Ans-

file = open("sample.txt", 'w')

# Overwrite the file

file.write(" I want to become a data scientist")

file.close()

file = open("sample.txt")

print(file.read())

**4)Explain the following with python code: read(),readline().readliness()**

Ans-

L = ["Learn\n", "Data\n", "Science\n"]

# writing to file

file1 = open('myfile.txt', 'w')

file1.writelines(L)

file1.close()

# Using readlines()

file1 = open('myfile.txt', 'r')

Lines = file1.readlines()

count = 0

# Strips the newline character

for line in Lines:

    count += 1

    print("Line{}: {}".format(count, line.strip()))

file =

myfile = open("test.txt", "r")

mylist = myfile.readlines()

print(mylist)

myfile.close()

f = open("demofile.txt", "r")  
print(f.read(33))

**5) Why with statement is used with open?What is the advantage of using with statement and open() together?**

Ans- The with statement works with the open() function **to open a file**.

Unlike open() where you have to close the file with the close() method, the with statement closes the file for you without you telling it to

**6)Explain the write() and writelines() functions. Give suitable examples**

Ans-

write() : This function writes a fixed sequence of characters to a file. writelines() : **This function writes a list of string**. append() : This function append string to the file instead of overwriting the file

file = open("Employees.txt", "w")

for i in range(3):

   name = input("Enter the name of the employee: ")

   file.write(name)

   file.write("\n")

file.close()

print("Data is written into the file.")

file1 = open("Employees.txt", "w")

lst = []

for i in range(3):

    name = input("Enter the name of the employee: ")

    lst.append(name + '\n')

file1.writelines(lst)

file1.close()

print("Data is written into the file.")

is used with open

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