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In [20]: 1. Write a Python program to read an entire text file.
def read(a):
    txt=open(a)
    print(txt.read())
a=input("enter the file name:")
read(a)

enter the file name:out.txt
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bangalore

In [21]: 2. Write a Python program to read first n lines of a file
my_file=open("out.txt","r")
n=int(input("enter no of lines to read:"))
i=0
for line in my_file:
    if i<n:
        print(line)
        i+=1
    else:
        break
my_file.close()

enter no of lines to read:3
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In [23]: 3. Write a Python program to append text to a file and display the text.
my_file=open("out.txt","a")
my_file.write("this is python assignment\n")
my_file1=open("out.txt","r")
for line in my_file1:
    print(line)
my_file.close()
my_file1.close()

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In [25]: 4. Write a Python program to read last n lines of a file.
my_file=open("out.txt","r")
n=int(input("enter the no of lines to read:"))
for line in(my_file.readlines()[n:]):
    print(line)
my_file.close()

enter the no of lines to read:2
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In [27]: 5. Write a Python program to read a file line by line store it into a variable
my_file=open("out.txt","r")
a=""
for line in my_file:
    a=a+line
print(a)
my_file.close()

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In [29]: 6. Write a Python program to read a file line by line and store it into a list.
my_file=open("out.txt","r")
l=[]
for line in my_file:
    l.append(line)
print(l)
my_file.close()

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In [31]: 7. Write a Python program to read a file line by line store it into an array.
def file_read(fname):
    content_array = []
    with open(fname) as f:
        for line in f:
            content_array.append(line)
    print(content_array)

file_read('out.txt')

['Ajay\n', 'B2\n', 'Hindupur\n', 'gitam university\n', 'banglorethis is python assignment\n', 'this is python assignment\n']

In [33]: 8. Write a Python program to count the number of lines in a text file.
def file_lengthy(fname):
    with open(fname) as f:
        for i, l in enumerate(f):
            pass
    return i + 1
print("Number of lines in the file: ",file_lengthy("out.txt"))

Number of lines in the file:  6

In [34]: 9. Write a Python program to get the file size of a plain file.
def file_size(fname):
    import os
    statinfo = os.stat(fname)
    return statinfo.st_size

print("File size in bytes of a plain file: ",file_size("out.txt"))

File size in bytes of a plain file:  96

In [35]: 10. Write a Python program to copy the contents of a file to another file
from shutil import copyfile
copyfile('out.txt', 'aph.txt')

Out[35]: 'aph.txt'

In [38]: 11. Write a Python program to sum all the items in a list.
def sum_list(items):
    sum_numbers = 0
    for x in items:
        sum_numbers += x
    return sum_numbers
print(sum_list([6,7,-19]))

-6

In [39]: 12. Write a Python program to multiplies all the items in a list.
def multiply_list(items):
    tot = 1
    for x in items:
        tot *= x
    return tot
print(multiply_list([8,9,-19]))

-1368

In [40]: 13. Write a Python program to get the largest & smallest number from a list.
def smallest_num_in_list( list ):
    min = list[ 0 ]
    for a in list:
        if a < min:
            min = a
    return min
print(smallest_num_in_list([8, 4, -13, 0]))

-13

In [41]: def largest_num_in_list( list ):
    max = list[ 0 ]
    for a in list:
        if a > max:
            max = a
    return max
print(largest_num_in_list([8, -13, 0]))

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In [42]: 14. Write a Python program to remove duplicates from a list.
a = [50,20,60,30,10,50,60,40,80,50,40]

dup_items = set()
uniq_items = []
for x in a:
    if x not in dup_items:
        uniq_items.append(x)
        dup_items.add(x)

print(dup_items)

{40, 10, 80, 50, 20, 60, 30}

In [43]: 15. Write a Python program to check a list is empty or not.
l = []
if not l:
    print("List is empty")

List is empty

In [44]: 16. Write a Python program to clone or copy a list.
original_list = [18, 22, 44, 83, 41]
new_list = list(original_list)
print(original_list)
print(new_list)

[18, 22, 44, 83, 41]
[18, 22, 44, 83, 41]

In [45]: 17. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.
Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']
Expected Output : ['Green', 'White', 'Black']

color = ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']
color = [x for (i,x) in enumerate(color) if i not in (0,2,4)]
print(color)

['Green', 'Black', 'Yellow']

In [46]: 18. Write a Python program to print the numbers of a specified list after removing even numbers from it.
num = [71,89, 1200, 75, 40, 80, 87]
num = [x for x in num if x%2!=0]
print(num)

[71, 89, 75, 87]

In [48]: 19. Write a Python program to shuffle and print a specified list.
from random import shuffle
names = ['ajay', 'krishna', 'reddy', 'K', 'R', 'Ph']
shuffle(names)
print(names)

['R', 'K', 'krishna', 'ajay', 'Ph', 'reddy']

In [49]: 20. Write a Python program to get the difference between the two lists.
list1 = [2, 3, 5, 7, 8]
list2=[1, 2, 4, 6, 7, 8]
diff_list1_list2 = list(set(list1) - set(list2))
diff_list2_list1 = list(set(list2) - set(list1))
total_diff = diff_list1_list2 + diff_list2_list1
print(total_diff)

[3, 5, 1, 4, 6]
```