Python Module-4 Assignment-1

1:Write a Python program to read an entire text file.

In [5]:

```
my_file=open("saketh1.txt","r")
for line in my_file:
    print(line)
my_file.close()
```

```
hii

i'm

saketh

from

cse-A

section

gitam

banglore
```

2:Write a Python program to read first n lines of a file

In [7]:

```
my_file=open("saketh1.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:5
hii

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```

3:Write a Python program to append text to a file and display the text.

In [9]:

```
my_file=open("saketh1.txt","a")
my_file.write("This is python assignment\n")
my_file1=open("saketh1.txt","r")
for line in my_file1:
    print(line)
my_file.close()
my_file1.close()
```

```
This is python assignment
```

4:Write a Python program to read last n lines of a file.

In [18]:

```
my_file=open("saketh2.txt","r")
n=int(input("Enter no.of lines to read:"))
for line in (my_file.readlines()[-n:]):
        print(line)
my_file.close()
```

```
Enter no.of lines to read:3
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```

5:Write a Python program to read a file line by line store it into a variable.

In [19]:

```
my_file=open("saketh2.txt","r")
a=""
for line in my_file:
    a=a+line
print(a)
my_file.close()
```

```
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```

6:Write a Python program to read a file line by line and store it into a list.

In [20]:

```
my_file=open("saketh2.txt","r")
l=[]
for line in my_file:
    l.append(line)
print(l)
my_file.close()
```

```
['hii\n', "i'm\n", 'saketh\n', 'from\n', 'cse-A\n', 'section\n', 'gitam\n', 'banglore']
```

7:Write a Python program to read a file line by line store it into an array.

In [21]:

```
my_file=open("saketh2.txt","r")
l=[]
for line in my_file:
    l.append(line)
print(l)
my_file.close()
```

```
['hii\n', "i'm\n", 'saketh\n', 'from\n', 'cse-A\n', 'section\n', 'gitam\n', 'banglore']
```

8:Write a Python program to count the number of lines in a text file.

In [22]:

```
my_file=open("saketh2.txt","r")
count=0
for line in my_file:
    count+=1
print("No.of lines in saketh2.txt:",count)
```

```
No.of lines in saketh2.txt: 8
```

9:Write a Python program to get the file size of a plain file.

In [25]:

```
import os
size=os.path.getsize("saketh2.txt")
print("Size of saketh2.txt:",size,"bytes")
```

```
Size of saketh2.txt: 55 bytes
```

10:Write a Python program to copy the contents of a file to another file .

In [28]:

```
my_file1=open("saketh2.txt","r")
my_file2=open("saketh3.txt","w")
for line in my_file1:
    my_file2.write(line)
my_file3=open("saketh3.txt","r")
for line in my_file3:
    print(line)
my_file1.close()
my_file2.close()
my_file3.close()
```

```
hii

i'm

saketh

from

cse-A

section

gitam

banglore
```

11:Write a Python program to sum all the items in a list.

In [29]:

```
l=[1,2,3,4,5,6,7,8,9,10]
sum=0
for i in l:
    sum+=i
print("Sum of elements of list:",sum)
```

```
Sum of elements of list: 55
```

12:Write a Python program to multiplies all the items in a list.

In [30]:

```
l=[1,2,3,4,5,6,7,8,9,10]
mul=1
for i in l:
    mul*=i
print("Multiplication of elements of list:",mul)
```

```
Multiplication of elements of list: 3628800
```

13:Write a Python program to get the largest & smallest number from a list.

In [31]:

```
l=[1,2,3,4,5,6,7,8,9,10]
s=l[0]
h=l[0]
for i in l:
    if s>i:
        s=i
    if h<i:
        h=i
print("Smallest value in list:",s)
print("largest value in list:",h)
```

```
Smallest value in list: 1
largest value in list: 10
```

14:Write a Python program to remove duplicates from a list.

In [32]:

```
l1=[10,20,30,40,10,20,30,40]
l2=[]
for i in l1:
    if i not in l2:
        l2.append(i)
    else:
        continue
print("After removing duplicates:")
print("List:",l2)
```

```
After removing duplicates:
List: [10, 20, 30, 40]
```

15:Write a Python program to check a list is empty or not.

In [33]:

```
l=[]
if len(l)==0:
    print("List is empty")
else:
    print("List is not empty")
```

```
List is empty
```

16:Write a Python program to clone or copy a list.

In [36]:

```
l1=[10,20,30,40]
l2=[]
for i in l1:
    l2.append(i)
print(l2)
```

```
[10, 20, 30, 40]
```

[10, 20, 30, 40]

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']

In [1]:

```
l1= ['Red','Green','White','Black','Pink','Yellow']
l2=[]
i=0
while i<len(l1):
    if i==0 or i==4 or i==5:
        i+=1
        continue
    else:
        l2.append(l1[i])
        i+=1
print("After removing 0th,4th and 5th positions:")
print("List:",l2)
```

```
After removing 0th,4th and 5th positions:
List: ['Green', 'White', 'Black']
```

18:Write a Python program to print the numbers of a specified list after removing even numbers from it.

In [2]:

```
l1=[1,2,3,4,5,6,7,8,9,10]
l2=[]
for i in l1:
    if i%2==0:
        continue
    else:
        l2.append(i)
print("After removing even numbers from list:")
print("List:",l2)
```

```
After removing even numbers from list:
List: [1, 3, 5, 7, 9]
```

19:Write a Python program to shuffle and print a specified list.

In [3]:

```
from random import shuffle
l=[1,2,3,4,5,6,7,8,9,10]
shuffle(l)
print(l)
```

```
[9, 7, 10, 8, 1, 6, 4, 3, 2, 5]
```

20:Write a Python program to get the difference between the two lists.

In [6]:

```
l1=[10,20,30,40,50,60,70,80,90,100]
l2=[1,2,3,4,5,6,7,8,9,10]
l3=[]
if len(l1)==len(l2):
    i,j=0,0
    while i<len(l1) and j<len(l2):
        l3.append(l1[i]-l2[j])
        i+=1
        j+=1
    print("Difference between two lists:",l3)
else:
    print("No.of elements are different.Not able to do difference")
```

```
Difference between two lists: [9, 18, 27, 36, 45, 54, 63, 72, 81, 90]
```

In [ ]:

```

```