FILE HANDLING

PROGRAMS

#Program in python to type text in a file till ~ is pressed as rightmost character

```python
f=open("d:\\a.txt","w")
s=''
print("Type text for file,press ~ as rightmost character for exit/save contents")
while s!='~':
    s=input()
    f.write(s+"\n")
    s=s[-1:]
f.close()
print("file contents saved")
```

#Program in python to read entire text file

```python
f=open("d:\\a.txt","r")
s=f.read()
print(s)
f.close()
```

#Program in python to read first 2 lines from text file

```python
from itertools import islice
f=open("d:\\a.txt","r")
for line in islice(f,2):
    print(line)
f.close()
```

```python
#Program in python to append text at the end of text file
f=open("d:\\a.txt","a")
s=input("enter a string to add at the end of file")
f.write(s)
f.close()
```

```python
#Program in python to read line by line from text file
f=open("d:\\a.txt","r")
for t in f.readlines():
    print(t,end="")
f.close()
```

```python
#Program in python to read entire file line by line in a list
f=open("d:\\a.txt","r")
t=f.readlines()
print(t)
f.close()
```

```python
#Program in python to read each word separately
f=open("d:\\a.txt","r")
for t in f.readlines():
    for r in t.split():
        print(r)
f.close()
```

```python
#Program in python to count no. of words in a text file
f=open("d:\\a.txt","r")
c=0
for t in f.readlines():
    for r in t.split():
        c=c+1
print("no of words in file are ",c)
f.close()
```

```python
#Program in python to show word with maximum length from
a text file
f=open("d:\\a.txt","r")
lword=''
for t in f.readlines():
    for r in t.split():
        if len(r)>len(lword):
            lword=r
print("maximum length word is ",lword)
f.close()
```

```python
#Program in python to display frequency of each word in a
text file.
from collections import Counter
f=open("d:\\a.txt","r")
r=Counter(f.read().split())
print(r)
```

#Program in python to store list elements in a file and read these contents from file again

```python
days=['sunday','monday','tuesday','wednesday','thursday','friday','saturday']
f=open("d:\\b.txt","w")
for c in days:
    f.write("%s\n"%c)
f.close()
f=open("d:\\b.txt","r")
for r in f.readlines():
    print(r,end="")
f.close()
```

#Python program to combine each line from first file with the corresponding line in second file

```python
f=open("d:\\a.txt","r")
g=open("d:\\b.txt","r")
for line1, line2 in zip(f,g):
    print(line1+line2)
```

#Python Program to Copy the Contents of One File into Another

```python
f=open("d:\\a.txt","r")
g=open("d:\\c.txt","w")
for line in f:
    g.write(line)
f.close()
g.close()
print("file contents copied")
```

Python Program to Search for a word in text file and print part of line

```python
#Python Program to Search for a word in text file and print part of line
f=open("d:\\c.txt","r")
for line in f.readlines():
    for part in line.split():
        if "volatile" in part:
            print(line)
f.close()
```

Note :- in above program we are searching word "volatile"

Python Program to read character by character from a text file

```python
#Python Program to read character by character from a text file
file = open('d:\\a.txt', 'r')
while 1:
    char = file.read(1)        # read by character
    if not char: break
    print (char),
file.close()
```

```python
#Python Program to convert file contents upper to lower and
lower to upper case in the same opened file.
file = open('d:\\c.txt', 'rb+')
while 1:
    char = file.read(1)        # read by character
    if not char: break
    pos=file.tell()
    file.seek(pos-1,0)
    if char.isupper():
        file.write(char.lower())
    else:
        file.write(char.upper())
file.close()
print("File contents upper to lower and lower to upper case
converted")
```

```python
#Python Program to read and write in a binary file.
import pickle

output_file = open("d:\\a.bin", "wb")

myint = 42
mystring = "Hello, world!"
mylist = ["dog", "cat", "lizard"]
mydict = { "name": "Bob", "job": "Astronaut" }

pickle.dump(myint, output_file)
```

```python
pickle.dump(mystring, output_file)
pickle.dump(mylist, output_file)
pickle.dump(mydict, output_file)

output_file.close()


input_file = open("d:\\a.bin", "rb")

myint = pickle.load(input_file)
mystring = pickle.load(input_file)
mylist = pickle.load(input_file)
mydict = pickle.load(input_file)

print("myint = %s" % myint)
print("mystring = %s" % mystring)
print("mylist = %s" % mylist)
print("mydict = %s" % mydict)

input_file.close()
```

Note :- Python has a module pickle which is extremely easy to use. It provides us with the ability to serialize and deserialize objects, i.e., to convert objects into bitstreams which can be stored into files and later be used to reconstruct the original objects.Above program demonstrate the same.