

**OMSAKTHI**  
**G B PUBLIC SCHOOL**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**CLASS XII-PYTHON TEXT FILES-Q & A**

1. Write a statement in Python to open a text file MARKER.TXT so that existing content can be read from it.

**Answers:**

```
file= open("MARKER.TXT","r")
```

OR

```
file= open("MARKER.TXT","r+")
```

2. Write a statement in Python to open a text file DATA.TXT so that new contents can be written in it.

**Answers:**

```
file= open("DATA.TXT","w")
```

OR

```
file= open("DATA.TXT","w+")
```

3. Write a statement in Python to open a text file WRITEUP.TXT so that new content can be written in it.

**Answers:**

```
file= open("WRITEUP.TXT","w")
```

OR

```
file= open("WRITEUP.TXT","w+")
```

4. Write a statement in Python to open a text file README.TXT so that existing content can be read from it.

**Answers:**

```
file= open("README.TXT","r")
```

OR

```
file= open("README.TXT","r+")
```

5. Write a statement in Python to open a text file STORY.TXT so that new contents can be added at the end of it.

**Answers:**

```
file= open( "STORY. TXT", "a") OR file. open( "STORY. TXT", "a")
```

6. Write a statement in Python to perform the following operations:

To open a text file "BOOK.TXT" in read mode

To open a text file "BOOK.TXT" in write mode

**Answers:**

```
f1 = open("BOOK.TXT",'r')
```

```
f2 = open("BOOK.TXT", 'w')
```

7. Write a statement in Python to perform the following operations:

● To open a text file "MYPET.TXT" in write mode

● To open a text file "MYPET.TXT" in read mode

**Answers:**

```
f1 = open("MYPET. TXT", ' w' )
```

```
f2 = open("MYPET. TXT", ' r' )
```

**8. Differentiate between file modes r+ and w+ with respect to Python.**

- r+ Opens a file for both reading and writing. The file pointer placed at the beginning of the file.
- w+ Opens a file for both writing and reading. Overwrites the existing file if the file exists. If the file does not exist, creates a new file for reading and writing.

**9. Differentiate between file modes r+ and rb+ with respect to Python.**

Ans r+ Opens a file for both reading and writing. The file pointer placed at the beginning of the file.

rb+ Opens a file for both reading and writing in binary format. The file pointer placed at the beginning of the file.

**10. Differentiate between the following :**

**(i) f = open ('diary.txt', 'a')**

**(ii) f = open ('diary.txt', 'w')**

Ans (i) diary.txt is opened for writing data at the end of file

(ii) diary.txt is opened for writing data from the beginning of file in create mode

**11. Write a method/function ABLINES() in python to read contents from a text file LINES.TXT, to display those lines, which are either starting with an alphabet 'A' or starting with alphabet 'B'.**

**For example:**

**If the content of the file is**

---

**A BOY IS PLAYING OUTSIDE  
THE PLAYGROUND IS BIG  
BANYAN TREE IS IN THE GROUND**

---

**The method/function should display**

**A BOY IS PLAYING OUTSIDE  
BANYAN TREE IS IN THE GROUND**

**Answers:**

```
def ABLINES():  
    file=open('LINES.TXT','r')  
    lines = file.readlines()  
    for w in lines:  
        if w[0]=="A" or w[0]=="B":  
            print w  
    file.close()
```

**12. Write a method/function SHORTWORDS() in python to read lines from a text file WORDBANK.TXT, and display those words, which are lesser than 5 characters.**

**For example:**

**If the content of the file is**

---

**HAPPY JOY WELCOME KITE  
LOVELY POSITIVE FUN**

---

**The method/function should display**

**JOY**

**KITE**

**FUN**

**Answers:**

```
def SHORTWORDS():
    c=0
    file=open('WORKBANK.TXT','r')
    line = file.read()
    word = line.split()
    for w in word:
        if len(w)<5:
            print w
    file.close()
```

**13. Write a method/function ISTOUPCOUNT() in python to read contents from a text file WRITER.TXT, to count and display the occurrence of the word "IS" or "TO" or "UP".**

**For example:**

**If the content of the file is**

---

**IT IS UP TO US TO TAKE CARE OF OUR SURROUNDING. IT IS NOT POSSIBLE ONLY FOR THE GOVERNMENT TO TAKE RESPONSIBILITY**

---

**The method/function should display**

**Count of IS TO and UP is 6**

**Answers:**

```
def ISTOUPCOUNT():
    c=0
    file=open('WRITER.TXT','r')
    line = file.read()
    word = line.split()
    for w in word:
        if w=="IS" or w=="TO" or w=="UP":
            c=c+1
    print "Count of IS TO and UP is ",c
    file.close()
```

**14. Write a method/function AEDISP() in python to read lines from a text file WRITER.TXT, and display those lines, which are starting either with A or starting with E.**

**For example:**

**If the content of the file is**

---

**A CLEAN ENVIRONMENT IS NECESSARY FOR OUR GOOD HEALTH.  
WE SHOULD TAKE CARE OF OUR ENVIRONMENT.  
EDUCATIONAL INSTITUTIONS SHOULD TAKE THE LEAD.**

---

**The method should display**

**A CLEAN ENVIRONMENT IS NECESSARY FOR OUR GOOD HEALTH.  
EDUCATIONAL INSTITUTIONS SHOULD TAKE THE LEAD.**

**Answers:**

```
def AEDISP():
    file=open('WRITER.TXT','r')
    lines = file.readlines()
    for w in lines:
        if w[0]=="A" or w[0]=="E":
            print w
    file.close()
```

**15. Write a method in python to read lines from a text file INDIA.TXT, to find and display the occurrence of the word "India".**

**For example:**

**If the content of the file is**

---

**"India is the fastest growing economy.**

**India is looking for more investments around the globe.**

**The whole world is looking at India as a great market.**

**Most of the Indians can foresee the heights that India is capable of reaching."**

**The output should be 4**

**Answers:**

```
def display1() :
    c=0
    file=open(' INDIA. TXT' , ' r' )
    c=0
    for LINE in file:
        Words = LINE. split()
        for W in Words:
            if W=="India":
                c=c+1
    print c
file. close()
OR
def display() :
    c=0
    file=open(' INDIA. TXT' , ' r' )
    lines = file. read()    # lines = file. readline()
    while lines:
        words = lines. split()
        for w in words:
            if w=="India":
```

```
        c=c+1
    lines = file.read()    # lines = file.readline()
    print c
file.close()
```

**16. Write a method in python to write multiple line of text contents into a text file myfile.txt line.**

**Answers:**

```
def writel() :
    f = open("myfile.txt", 'w' )
    while True:
        line = raw_input("Enter line")
        f.write(line)
        choice = raw_input("Are there more lines")
        if choice == 'N' :
            break;
    f.close()
```

**17. Write a method in python to write multiple line of text contents into a text file daynote.txt line.**

**Answers:**

```
def writel() :
    f = open("daynote.txt", 'w' )
    while True:
        line = raw_input("Enter line")
        f.write(line)
        choice = raw_input("Are there more lines")
        if choice == 'N' :
            break
    f.close()
```

**18. Write a method in Python to read lines from a text file DIARY.TXT, and display those lines, which are starting with an alphabet 'P'.**

**Answers:**

```
def display():
    file=open('DIARY.TXT','r')
    line=file.readline()
    while line:
        if line[0]=='P' :
            print line
            line=file.readline()
    file.close()
```

**19. Write a method in python to read lines from a text file MYNOTES.TXT, and display those lines, which are starting with an alphabet 'K'.**

**Answers:**

```

def display():
    file=open('MYNOTES.TXT','r')
    line=file.readline()
    while line:
        if line[0]=='K' :
            print line
            line=file.readline()
    file.close() #IGNORE

```

**20. Write a method in python to read the content from a text file story.txt line by line and display the same on screen.**

**Answers:**

```

def read_file () :
    inFile = open('story.txt', 'r' )
    for line in inFile:
        print line

```

### ASSIGNMENT QUESTIONS

**1. How are following codes different from one another ?**

(a) my\_file = open ('poem, txt','r') my\_file.read()  
 (b) my\_file = open ('poem, txt',' r') my\_file.read(100)

**2. If the file 'poemBTH.txt' contains the following poem (by Paramhans Yoganand) :**

God wade the Earth;  
 Man wade confining countries  
 And their fancy-frozen boundaries.  
 But with unfound boundless love  
 I behold the borderland of my India  
 Expanding into the World.

Hail, mother of religions, Lotus, scenic beauty, and sages!

**3. Then what outputs will be produced by both the code fragments given in question1.**

**Consider the file "poemBTH.txt" given above (in previous question). What output will be produced by following code fragment ?**

```

Obj1= open("poemBTH.txt","r")
S1= obj1.readline()
s2.readline(10)
s3 = obj1.read(15)
print(s3 )
print(obj1.readline())
obj1.close()

```

**4. Consider the file "poemBTH.txt" and predict the outputs of following code fragments if the file has been opened in filepointer file1 with code:**

**file1 = open("E:\\mydata\\poemBTH.txt","r+")**

(a) print("A. Output 1")  
 print(file1.read())  
 print()

(d) print("D. Output 4")  
 print(file1.readline(9))

```
(b) print("B. Output 2")
print(file1.readline() )
print()
(c) print("C. Output 3")
print(file1.read(9))
print()
```

```
(e) print<"E.OutPut of Readlines function is">
print(file1.readlines())
print()
```

NOTE. Consider the code fragments in succession, i.e., code (b) follows code (a), which means changes by code (a) remain intact. Similarly, code (c) follows (a) and (b), and so on.

**5. What is following code doing ?**

```
file = open("contacts.csv", "a")
name = input("Please enter name.")
phno = input("Please enter phone number.")
file.write (name + "," + phno + "\n")
```

**6. Write code to open file created in previous question and print it in following form :**

Name : <name>                      Phone :<phone number>

**7. Consider the file "contacts.csv" created in above question and figure out what the following code is trying to do?**

```
name = input("Enter name :")
file = open("contacts.csv", "r")
for line in file:
```

```
    if name in line:
        print(line)
```

**8. Consider the file poemBTH.txt and predict the output of following code fragment. What exactly is following code fragment doing ?**

```
f = open("poemBTH.txt", "r")
nl = 0
for line in f:
    nl += 1
print(nl)
```

**9. Write a method in python to read the content from a text file diary.txt line by line and display the same on screen.**

**10. Write a method in python to write multiple line of text contents into a text file mylife.txt.line.**

**Programming Practice/Knowledge based Questions**

1. Write a program to get roll numbers, names and marks of the students of a class(get from user) and store these details in a file called "Marks.dat".
2. Write a program to add two more students details to the file created in program 1.
3. Write a program to display the contents of file "Marks.dat" created through program 1 and program 2.
4. Write a program that reads a text file and creates another file that is identical except that every sequence of consecutive blank spaces is replaced by a single space.
5. A file sports.dat contains information in following format : Event - Participant  
Write a function that would read contents from file sports.dat and creates a file named Athletic.dat copying only those records from sports.dat where the event name is "Athletics".
6. A file contains a list of telephone numbers in the following form :  
Arvind 7258031 Sachin 7259197

The names contain only one word the names and telephone numbers are separated by white spaces. Write program to read a file and display its contents in two columns.

7. Write a program to count the words "to" and "the" present in a text file "Poem.txt".
8. Write a program to count the number of upper- case alphabets present in a text file "Article.txt".
9. Write a program that copies one file to another. Have the program read the file names from user ?
10. Write a program that appends the contents of one file to another. Have the program take the filenames from the user.
11. Write a program that reads characters from the keyboard one by one. All lower case characters get stored inside the file LOWER, all upper case characters get stored inside the file UPPER and all other characters get stored inside file OTHERS.
12. Write a function in Python to count and display the number of lines starting with alphabet 'A' present in a text file " LINES.TXT". e.g., the file "LINES.TXT" contains the following lines :  
A boy is playing there.  
There is a playground.  
An aeroplane is in the sky.  
Alphabets & numbers are allowed in password.  
the function should display the output as 3.

13. A text file named CONTENTS. TXT contains some text. Write a user-defined function LongWords() in PYTHON which displays all such words of the file whose length is more than 9 alphabets. For example: if the file CONTENTS. TXT contains:  
"Conditional statements of PYTHON programming language are if and elif"  
Then the function LongWords() should display the output as:

Conditional  
statements  
programming

**SOLUTION:**

```
def LongWords():  
    file=open('CONTENTS.TXT','r')  
    line=file.read()  
    word=line.split()  
    for w in word:  
        if len(w)>9:  
            print(w)  
    file.close()
```

14. A text file named MESSAGE. TXT contains some text. Another text file named SMS. TXT needs to be created such that it would store only the first 1 50 characters from the file MESSAGE. TXT. Write a user-defined function LongToShort() in PYTHON that would perform the above task of creating SMS. TXT from the already existing file MESSAGE. TXT.

**SOLUTION:**

```
def LongToShort():  
    file=open('MESSAGE.TXT','r')  
    line=file.read(150)  
    print(line)
```



```
file1=open('SMS.TXT','w')
file1.write(line)
print("written successfully")
file.close()
file1.close()
```

15. A text file named WORDS.TXT contains some text. Write a user-defined function MAGICWORDS() in PYTHON to read and display those words, which is starting with alphabet 'A' (irrespective of upper or lower case).

For example: if the file WORDS.TXT contains:

A lot of adorable cute dolls were displayed in Showbiz festival.

Anya had boxes of Pizzaz in her hand

The function should display:

A

adorable

Anya

**SOLUTION:**

```
def MAGICWORDS():
    file=open('WORDS.TXT','r')
    file1=open('MAGICWORDS.TXT','w')
    line=file.read()
    word=line.split()
    for w in word:
        if w[0]=="A"or w[0]=="a":
            file1.write(w)
            print(w)
    file.close()
    file1.close()
```

16. A text file named DRAFT.TXT contains some text. Write a user-defined function MakeNew() in PYTHON, which transfers lines from DRAFT.TXT to FINAL.TXT, which are not starting with alphabet 'X'.

For example: if the file DRAFT.TXT contains:

Completed 3 chapters of Chemistry

XCompleted all chapters of English

Completed 4 chapters of Physics

Completed 5 chapters of English

Then the function MakeNew() should transfer the following lines to FINAL.TXT:

Completed 3 chapters of Chemistry

Completed 4 chapters of Physics

Completed 5 chapters of English

**SOLUTION:**

```
def MakeNew():
    file=open('DRAFT.TXT','r')
    file1=open('FINAL.TXT','w')
    line=file.readlines()
```

```
for w in line:
    if w[0]!="X"and w[0]!="x":
        file1.write(w)
        print(w)
file.close()
file1.close()
```

17. A text file named MATTER.TXT contains some text, which needs to be displayed such that every next character is separated by a symbol '#'.

Write a function definition for HashDisplay() in PYTHON that would display the entire content of the file MATTER.TXT in the desired format.

Example:

If the file MATTER.TXT has the following content stored in it:

THE WORLD IS ROUND

The function HashDisplay() should display the following content:

T#H#E# #W#O#R#L#D# #I#S# #R#O#U#N#D#

**SOLUTION:**

```
def HashDisplay():
    file=open('MATTER.TXT','r')
    line=file.read()
    for w in line:
        print(w,"#")
    file.close()
```

18. A text file named MESSAGE.TXT contains some text. Another text file named SMS.TXT needs to be created such that it would store only the first 150 characters from the file MESSAGE.TXT. Write a user-defined function LongToShort() in PYTHON that would perform the above task of creating SMS.TXT from the already existing file MESSAGE.TXT.

**SOLUTION:**

```
def LongToShort():
    file=open('MESSAGE.TXT','r')
    line=file.read(150)
    print(line)
    file1=open('SMS.TXT','w')
    file1.write(line)
    print("written successfully")
    file.close()
    file1.close()
```

19. Aditi has used a text editing software to type some text. After saving the article as WORDS.TXT, she realised that she has wrongly typed alphabet J in place of alphabet I everywhere in the article.

Write a function definition for JTOI() in PYTHON that would display the corrected version of entire content of the file WORDS.TXT with all the alphabets "J" to be displayed as an alphabet "I" on screen.

Note: Assuming that WORD.TXT does not contain any J alphabet otherwise.

Example:

If Aditi has stored the following content in the file WORDS.TXT:

WELL, THJS JS A WORD BY JTSELF. YOU COULD STRETCH THJS TO BE A SENTENCE

The function JTOI() should display the following content:

WELL, THIS IS A WORD BY ITSELF. YOU COULD STRETCH THIS TO BE  
A SENTENCE

20. Polina Raj has used a text editing software to type some text in an article. After saving the article as MYNOTES.TXT, she realised that she has wrongly typed alphabet K in place of alphabet C everywhere in the article.

Write a function definition for PURETEXT() in PYTHON that would display the corrected version of the entire article of the file MYNOTES.TXT with all the alphabets "K" to be displayed as an alphabet "C" on screen.

Note: Assuming that MYNOTES.TXT does not contain any C alphabet otherwise.

Example:

If Polina has stored the following content in the file MYNOTES.TXT:

I OWN A KUTE LITTLE KAR.

I KARE FOR IT AS MY KHILD.

The function PURETEXT() should display the following content:

I OWN A CUTE LITTLE CAR.

I CARE FOR IT AS MY CHILD.

21. Write a method/function BIGLINES() in Python to read lines from a text file CONTENT.TXT, and display those lines, which are bigger than 20 characters. 2

For example :

If the content of the file is

Stay positive and happy

Work hard and dont give up hope

Be open to criticism and keep learning

Surround yourself with happy, warm and genuine people

The method/function should display

Be open to criticism and keep learning

Surround yourself with happy, warm and genuine people

**SOLUTION:**

```
def BIGLINES():
    file=open('CONTENT.TXT','r')
    line=file.readline()
    while line:
        if len(line)>20:
            print(line)
            line=file.readline()
    file.close()
```

22. Write function definition for DISP3CHAR() in PYTHON to read the content of a text file KIDINME.TXT, and display all those words, which have three characters in it.

Example:

If the content of the file KIDINME.TXT is as follows:

When I was a small child, I used to play in the garden with my grand mom. Those days were amazingly funful and I remember all the moments of that time

The function DISP3CHAR() should display the following:  
was the mom and all the

**SOLUTION:**

```
def DISP3CHAR():  
    file=open('KIDINME.TXT','r')  
    line=file.read()  
    word=line.split()  
    for w in word:  
        if len(w)==3:  
            print(w)  
    file.close()
```