**INDIAN SCHOOL AL WADI AL KABIR**

**Worksheet, 2023-24**

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| **Class: XII** | **SUB: COMPUTER SCIENCE** | **Date of Completion:****08-08-2023** |
| **Note:Try the python coding.** | **TOPIC: Data file handling & Functions****Holiday Homework Worksheet** | **Write these programs in your class note book** |

1. Which of the following options can be used to read the first line of a text file Myfile.txt?

 a. myfile = open('Myfile.txt'); myfile.read()

 b. myfile = open('Myfile.txt','r'); myfile.read(n)

 c. myfile = open('Myfile.txt'); myfile.readline()

 d. myfile = open('Myfile.txt'); myfile.readlines()

2. Assume that the position of the file pointer is at the beginning of 3rd line in a text file. Which of

 the following option can be used to read all the remaining lines?

 a. myfile.read()

 b. myfile.read(n)

 c. myfile.readline()

 d. myfile.readlines()

3. Which of the following statement opens a binary file record.dat in write mode and writes data from

 a list lst1 = [1,2,3,4] on the binary file?

a. with open('record.dat','wb') as myfile:

 pickle.dump(lst1,myfile)

b. with open('record.dat','wb') as myfile:

 pickle.dump(myfile,lst1)

c. with open('record.dat','wb+') as myfile:

 pickle.dump(myfile,lst1)

d. with open('record.dat','ab') as myfile:

 pickle.dump(myfile,lst1)

4. Suppose content of 'Myfile.txt' is

Humpty Dumpty sat on a wall

Humpty Dumpty had a great fall

All the king's horses and all the king's men

Couldn't put Humpty together again

What will be the output of the following code?

myfile = open("Myfile.txt")

record = myfile.read().split()

print(len(record))

myfile.close()

a. 24

b. 25

c. 26

d. 27

5. Write a method/function COUNTLINES\_ET () in python to read lines from a text file

 REPORT.TXT, and count those lines which are starting either with ‘E’ or starting with ‘T’ respectively. And display the Total count separately.

For example, If REPORT.TXT consists of

“ENTRY LEVEL OF PROGAMMING CAN BE LEARNED FROM PYTHON.

 ALSO, IT IS VERY FLEXIBLE LANGUAGE.

THIS WILL BE USEFUL FOR VARIETY OF USERS.”

Then, output will be:

No. of Lines with E: 1

No. of Lines with T: 1

6. Write a method / function SHOW\_TODO () in python to read contents from a text file ABC.TXT

 and display those lines which have occurrence of the word “TO” or “DO”.

 For Example: If the content of the file is:

“THIS IS IMPORTANT TO NOTE THAT SUUCESS IS THE RESULT OF HARD WORK.

WE ALL ARE EXPECTED TO DO HARD WORK.

AFTER ALL EXPERIENCE COMES FROM HARDWORK.”

 The method / function should display:

 THIS IS IMPORTANT TO NOTE THAT SUUCESS IS THE RESULT OF HARD WORK.

 WE ALL ARE EXPECTED TO DO HARD WORK.

7. A binary file named “EMP.dat” has some records of the structure [EmpNo, EmpName, Post,

 Salary].

i. Write a user defined function NewEmp() to input the details of a new employee from the user

 and store it in EMP.dat .

ii. Write a user-defined function named SumSalary(Post) that will accept an argument, the post of

 employee & read the contents of EMP.dat and calculate the SUM of salary of all employees of

 that Post.

 8. A binary file “TEST.DAT” has some records of the [TestId, Subject, MaxMarks, ScoredMarks].

 Write a function in python named CountGradeAB(Sub) that will accept a subject as an argument

 and read the contents of TEST.DAT. The function will calculate & display the Count of Grade A

 (i.e. scored marks is 90 and above) and Count of Grade B (i.e., scored marks is 80 – 89 marks) of

 the passed subject on screen.

 9. A binary file “Student.dat” has structure [RollNo, StName, Stream, Percentage].

i. Write a user defined function CreateFile() to input data for a record and add to Student.dat .

ii. Write a function CountRec(Stream) in Python which accepts the Stream name as parameter and

 count and return number of students who have chosen the stream stored in the binary file

 “Student.dat”

 10. A binary file “emp.dat” has structure [EID, Ename, designation, salary].

i. Write a user defined function CreateEmp() to input data for a record and create a file emp.dat.

ii. Write a function display() in Python to display the detail of all employees whose salary is more

 than 50000.

11.

 i. A binary file “emp.DAT” has structure (EID, Ename, designation, salary). Write a function to add

 more records of employees in existing file emp.dat.

 ii. Write a function Show() in Python that would read detail of employee from file “emp.dat” and

 display the details of those employee whose designation is “Salesman”.

12. Write a python function to which takes List as a parameter and create 2 list one holding even values and another holding odd values and print the same.

13.Write a python function which takes string value from user and count the words starting from upper case.

**Note: Write the answers in your Computer Science Theory Note Book**

**and submit to your Teacher on or before 08/08/2023.**