PM SHRI KENDRIYA VIDYALAYA NO2 AFS HINDAN

Class XII

Computer Science

Holiday Homework

- 1) Complete Practical File.
- 2) Complete Project File.
- 3) Solve the Following Questions.

1) vedika has created a dictionary containing names and marks as key-value pairs of 5 students. Write a program, with separate user-defined functions to perform the following operations:

- 1. Push the keys (name of the student) of the dictionary into a stack, where the corresponding value (marks) is greater than 70.
- 2. Pop and display the content of the stack.

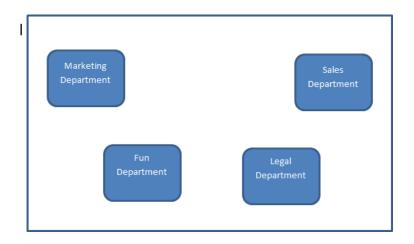
The dictionary should be as follows:

d={"Ramesh":58, "Umesh":78, "Vishal":90, "Khushi":60, "Ishika":95}

Then the output will be: Umesh Vishal Ishika

- 2) Write add(Books) and delete(Books) methods in Python to add Books and Remove Books considering them to act as append() and pop() operations in Stack. .
- 3) Write a function display_oddLines() to display odd number lines from the text file. Consider above file friends.txt. .
- 4) Write a function AMCount() in Python, which should read each character of a text file STORY.TXT, should count and display the occurrences of alphabets A and M (including small cases a and m too).
- 5) A binary file "student.dat" has structure [rollno, name, marks].
- i. Write a user defined function insertRec() to input data for a student and add to student.dat. .
- ii. Write a function searchRollNo(r) in Python which accepts the student's rollno as parameter and searches the record in the file "student.dat" and shows the details of student i.e. rollno, name and marks (if found) otherwise shows the message as 'No record found'.
 - 6) A binary file "Bank.dat" has structure as [account no, cust name, balance].
- i. Write a user-defined function addfile() and add a record to Bank.dat.
- ii. Create a user-defined function CountRec() to count and return the number of customers whose balance amount is more than 100000. (i).
- 7) write a python function searchesv()to find only those records from the file product.csv whose quantity is more than 150.also include the first row with headings sample of product.csv.
- 8)Write a python function to find transfer only those records from the file product.csv to another file "pro1.csv" whose quantity is more than 150. also include the first row with headings sample of product.csv is given below pid,pname,cost,quantity p1,brush,50,200
- 9) Write difference between text file and binary file?
- 10) What is Data structure? Define stack?
- 11) Packers and movers Pvt. Ltd. is setting up the network in Mumbai. There are four departments

named as MrktDept, FunDept, LegalDept, and SalesDept.



Distance between various buildings:	Number of Computers in the
MrktDept to FunDept 80 m	buildings
MrktDept to LegalDept 180 m	MrktDept 20
MrktDept to SalesDept 100 m	LegalDept 10
LegalDept to SalesDept 150 m to FunDept 100 m	FunDept 8 LegalDept
FunDept to SalesDept 50 m	SalesDept 42

- (i) Suggest a cable layout of connections between the Departments and specify topology.
- (ii) Suggest the most suitable building to place the server with a suitable reason.
- (iii) Suggest the placement of
 - a) Modem b) Hub /Switch in the network.

The organization is planning to link its sale counter situated in various part of the same city/ which type of network out of LAN, WAN, MAN will be formed? Justify.

- 12)Differentiate between packet switching and message switching technique in network Communication.
- 13) What is the importance of URL in networking?
- 14) Define the term firewall.
- 15) define Network Devices?