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	PROGRAMS USING FUNCTIONS	
Q.NO		PG NO
1	Write a program to check whether a number is even or odd	
2	Write a program to create a mirror of the given string. For example, "wel" = "lew".	
3	Write a program to generate values from 1 to 10 and then remove all the odd numbers from the list	
4	Write a program using functions to calculate the n <sup>th</sup> term of Fibonacci series	
5	Write a program to search any word in given string/sentence	
6	Write a menu driven program to input any number from user and check it is prime, factorial of the number and Armstrong number	
	TEXT FILES	
7	Write a function in python to read lines from "poem.Txt" and display all those Words, which has two characters in it.	
8	Write a function in Python to read a text file, Alpha.txt and displays those lines which begin with the word 'You'.	
9.	Write a function, vowelCount () in Python that counts and displays the number of vowels in the text file named Poem.txt.	
10	Write a method COUNTLINES() in Python to read lines from text file 'TESTFILE.TXT' and display the lines which are not starting with any vowel.  Example: If the file content is as follows: An apple a day keeps the doctor away. We all pray for everyone's safety. A marked difference will come in our country.  The COUNTLINES() function should display the output as:	
11	Write a function ETCount() in Python, which should read each character of a text file "TESTFILE.TXT" and then count and display the count of occurrence of alphabets E and T individually (including small cases e and t too).  Example:  If the file content is as follows:  Today is a pleasant day.  It might rain today.  It is mentioned on weather sites  The ETCount() function should display the output as:  E or e: 6  T or t: 9	

	· <del>_</del>	
12	Write the definition of a Python function named LongLines() which reads the	
	contents of a text file named 'LINES.TXT' and displays those lines from the file	
	which have at least 10 words in it. For example, if the content of 'LINES.TXT' is	
	as follows:	
	Once upon a time, there was a woodcutter	
	He lived in a little house in a beautiful, green wood. One day, he was merrily	
	chopping some wood.	
	He saw a little girl skipping through the woods, whistling happily. The girl was	
	followed by a big gray wolf.	
	Then the function should display output as:	
	He lives in a little house in a beautiful, green wood.	
	He saw a little girl skipping through the woods, whistling happily.	
12		
13	Write a function count_Dwords() in Python to count the words ending with a digit	
	in a text file "Details. txt". Example: If the file content is as follows:	
	On seat2 VIP1 will sit and	
	On seat1 VVIP2 will be sitting	
	0	
	Output will be:	
	Number of words ending with a digit are 4	
	BINARY FILES	
14	Consider a file, SPORT.DAT, containing records of the following structure:	
	[SportName, TeamName, No_Players]	
	Write a function <b>copyData()</b> , that reads contents from the file SPORT.DAT and	
	copies the records with Sport name as "Basket Ball" to the file named	
	BASKET.DAT. The function should return the total number of records copied to	
	the file BASKET.DAT.	
15	A Binary file, CINEMA.DAT has the following structure:	
	{MNO:[MNAME, MTYPE]} Where	
	MNO – Movie Number	
	MNAME – Movie Name	
	MTYPE is Movie Type	
	Write a user defined function, findType(mtype), that accepts mtype as parameter	
	and displays all the records from the binary file CINEMA.DAT, that have the	
	value of Movie Type as mtype.	
16	Create a binary file <b>student.dat</b> to hold students' records like Rollno,Students	
	name, and Address using the list. Write functions to write data, read them, and	
	print on the screen.	
17	Write a program to store customer data into a binary file <b>cust.dat</b> using a	
1 /	dictionary and print them on screen after reading them. The customer data	
	contains ID as key, and name, city as values.	
18	Menu Driven program with all operations	
10	Wiena Dirven program with an operations	
	Write a manu driven program as following:	
	Write a menu driven program as following:	
	1 Incort record	
	1. Insert record	
	2. Search Record	
	3. Update Record	
	4. Display record	

	5. Exit	
19	Write a function to write data into binary file <b>marks.dat</b> and display the records of students who scored more than 95 marks.  Write a function to count records from the binary file <b>marks.dat</b> .	
20	A binary file "CUSTOMER.DAT" has structure (Customer_number, Name, Discount_Percentage). Write a function countrec () in Python that would read contents of the file "CUSTOMER.DAT" and display the details of those customer whose Discount_percentage is above 60. Also display number of students scoring above 60%	
	CSV FILES	
21	Ram is a Python programmer working in a school. For the Annual Sports Event, he has created a csv file named Result.csv, to store the results of students in different sports events.  The structure of Result.csv is: [St_Id, St_Name, Game_Name, Result] Where St_Id is Student ID (integer)	
	ST_name is Student Name (string) Game_Name is name of game in which student is participating(string) Result is result of the game whose value can be either 'Won', 'Lost' or 'Tie' For efficiently maintaining data of the event, Ram wants to write the following user defined functions:  Accept() – to accept a record from the user and add it to the file Result.csv. The column headings should also be added on top of the csv file.	
	wonCount() – to count the number of students who have won any event. As a	
22	Python expert, help him complete the task.  Consider the following CSV file (emp.csv):  (i) Write python function DISPEMP () to read the content of file emp.csv and display only those records where salary is 4000 or above.	
	(ii) Write a python function DISPEMP () to read the content of file emp.csv and count how many employee are earning less than 5000. (iii)write a python function SNAMES() to read the content of file emp.csv and display the employee record whose name begins with "s" also show no. of employee with first letter "s" out of total record.	
23	Write a menu-driven program implementing user-defined functions to perform different functions as on csv file "students.csv".Each record consists of a list with field elements as sid, s_name, Stream, ClassTeacher,address respectively (i) Write a single record to csv. (ii) Write all the records in one single go onto the csv. (iii) Display the contents of the csv file. (iv)STUDENT_SEARCH ():Takes the sid as the input and displays all the student records.	
	STACK	
24	Write a menu-driven python program to implement stack operation.	
25	A list contains following record of customer. [Employee_name, department] Write the following user defined functions to perform given operations on the stack name 'Hospital':	

	(i) Push_Emp() –To Push Employee names of those customers who are in 'Ent' department
	(ii) Pop_Emp() –To Pop the names of Employee from the stack and display them. Also, display "Underflow" when there are no Employee in the stack.
26	Write a program to implement a stack for these book_details (book_no,book_name). That is, now each item node of the stack contains two types of information- a book number and book name. Just implement all the stack operation using functions to push, pop and display operations.