SSN COLLEGE OF ENGINEERING (Autonomous)
(Affiliated to Anna University, Chennai)
DEPARTMENT OF CSE
UCS 1211 PROGRAMMING IN C LABORATORY
A7: Files in C

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Learning Outcome :

To be proficient in handling files in C

a) File Creation
b) File Operation using fscanf, fprintf,fgetc,fputc,fgets,fputs
c) File Manipulations using fseek,ftell,fgetpos,fsetpos

To learn modular and incremental programming.

To write maintainable code.

To make multi file program using header files.

Write the algorithm to solve the following problems and implement them in C.

Create a file called input.txt with 5 lines of contents.

1. Write a C program to read the text file input.txt and display it on the console. Make it as header file as input.h. Use this to read the file whereever necessary.
2. Modify Program.1 to count the number of characters, spaces, digits in that file
3. Modify Program.2 to count the number of words, lines in the same file.
4. Copy the content of the file input.txt into another file sample.txt.
5. Search for the content for the occurrence of vowel characters and replace it with 'z'. And display the content on the screen.
6. Search for the middle content of the file say m be the location of it. Copy (m-n) to (m+n) contents to another file called copy.txt using fseek().
7. Redo 2nd problem of A6 using files. (fread, fwrite). Read the input from file and write output to another file.
8. Read the following contents
   "This is ssn college of engineering at chennai. Chennai is otherwise called as singara chennai"
   from the console and write it to a file. Whenever you encounter chennai record its position using fgetpos(). Then replace it with Tamilnadu using fsetpos().
   Output: Final content of the file:
   "This is ssn college of engineering at Tamilnadu. Tamilnadu is otherwise called as singara Tamilnadu"
9. Count the number of account holders whose balance is less than the minimum balance and display the same using sequential access file. **(Hint: Use structure to represent the account)**
10. Create a telephone directory and perform the following operations: insert, update, delete and append telephone details of an individual into the telephone directory using random access file. **(Hint: Use structure to represent the telephone record and have necessary attributes such as name, address, phone_number)**

//Optional (mandatory for fast learners)

11. Programming Problem 13.18 of textbook Byron page no. 13.40.