

1. A file contains some polynomial equations. Write a Program to add all equations. Also write a program to multiple the equations. Create separate files for the different modules.
2. A file "students\_record.txt" (attachment available) contains enrollment id, registration no and Name of your batch. Create a linked list to read the record from the above mentioned file. Student's record should be stored in file according to their enrollment no. Write a menu driven program to solve the following purpose:
  - a. Add a new student in his/her proper place.
  - b. Delete an existing record.
  - c. Update an existing record.
  - d. Search a record name-wise as well as enrollment-wise.
  - e. Display the name in dictionary order.
3. A text file stores the browser history in the form of a URL. Later we can view the earlier history from the file. It will show the next and previous if input is 'f' and 'b' respectively. Write a menu driven program to simulate it. Your program should have proper error checking for the different conditions. A doubly linked may be used.
4. A word processor reads the word from a text file, arranges the words in dictionary order and also counts the frequency of each word. Design this word processor and show the words along with the frequencies. You may use a doubly circular linked list to implement this concept.
5. A music player reads the track names from a text file, create a playlist. It can play from the first track and as well as from any specified track. It can also repeat the tracks. It will change the track after getting suitable input from the user only. It allows the user to add a specific track after or before an existing track. First track will be played if 'N' is pressed after the last track. The user guide for this player is given below:
  - S: start the player
  - J: Jump to a specific track
  - N: next track
  - P: previous track
  - F: first track
  - L: last track
  - A: add a track after an existing track
  - B: add a track before an existing track
  - R: remove a specific track from the list
  - O: sort the tracks in alphabetical order

T: stop the player

C: change the track position

D: display all tracks, Add a \* besides the current track

Write a program to simulate the above specified music player.

6.