

SS Module V Important Questions

1. Define macro. Explain macro with an example.

- allows the programmer to write shorthand version of a program
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2. Write the one pass microprocessor algorithm and explain the datastructures used.

3. Explain any two machine independent microprocessor features

4. Explain concatenation of macro parameters.

5. Explain generation of unique labels

6. Explain recursive macro expansion.

7. Explain conditional macro expansion.

8. Explain microprocessor design options

9. Explain the general design of device drivers

10. Differentiate between character and block device drivers.

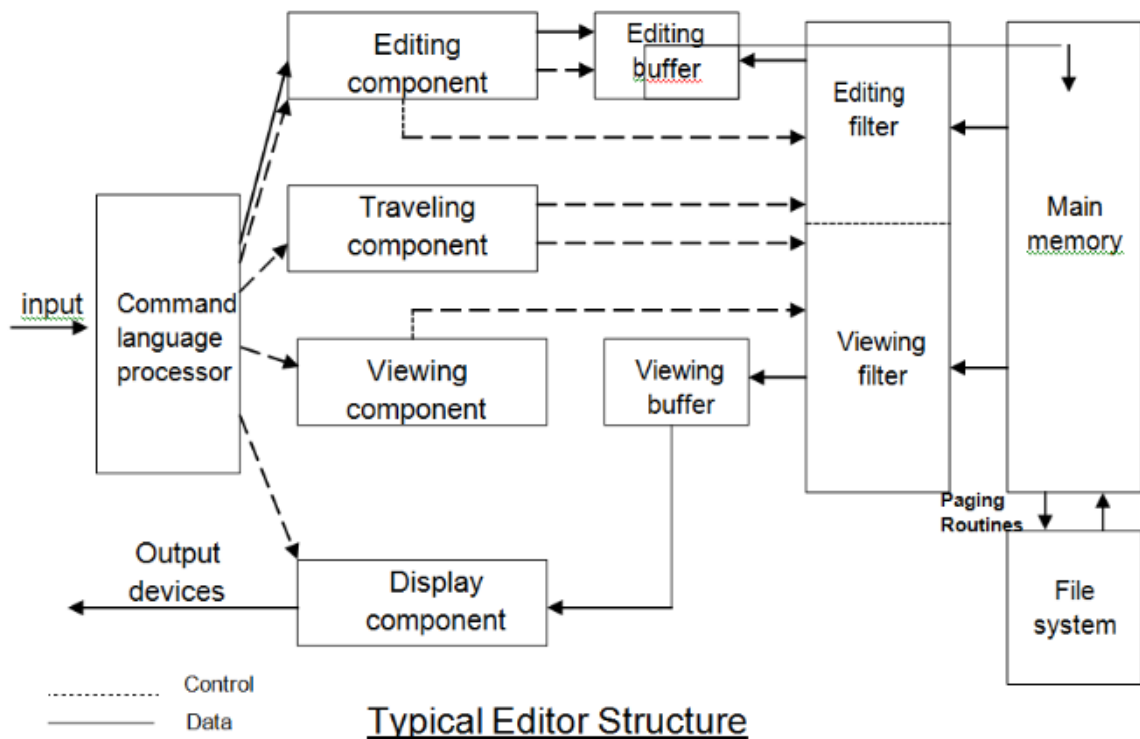
11. Explain editor structure with a neat diagram

- text editor allows you to edit a text file
- Moving the cursor, Deleting, Replacing, Pasting, Searching, Searching and replacing,
- Document editing process has 4 tasks
 - Select the part of the target document to be viewed and manipulated
 - Determine how to format this view on-line and how to display it
 - Specify and execute operations that modify the target document
 - Update the view appropriately
- For the above above, we have travelling, filtering and formatting
 - Travelling
 - To locate area of interest
 - Filtering

- Extract the relevant subset
- Formatting
 - How the result of filtering is formatting
- Editing
 - Target document is created or altered with a set of operations such as insert, delete, replace, move and copy

Editor Structure

- Command language Processor accepts command, uses semantic routines – performs functions such as editing and viewing. The semantic routines involve
 - traveling
 - editing
 - viewing
 - display functions
- The command language processor accepts input from the user's input devices
- Editing Component - In editing a document, the start of the area to be edited is determined by the current editing pointer maintained by the editing component
- Travelling component – determines the point at which the viewing/editing filtering begins.
- Editing filter- When the user issues an editing command the editing component invokes the editing filter.
- Filtering consists of selection of continuous characters beginning at the current point
- Viewing component- the start of the area to be viewed is determined by the viewing pointer. This pointer is maintained by the viewing component.
- Then the display need to be updated the viewing component invokes the viewing filter
- This component filters the document to generate a new viewing buffer.
- Display component- The viewing buffer is then passed to the display component which produces a display by mapping the buffer to a rectangular subset of the screen called window.



12. Explain the user interface of an editor.

- The user interface is concerned with, the input devices, the output devices and, the interaction language
- The input devices are used to enter elements of text being edited, to enter commands.
 - Input Devices are divided into three categories
 - text devices
 - keyboard
 - button or choice devices
 - Locator devices
 - mouse
 - Voice input devices-
- The output devices, lets the user view the elements being edited
- the interaction language provides communication with the editor.
 - Menu oriented systems
 - Function key oriented-

13. Explain the debugging functions and capabilities.

14. Explain the debugging methods

- There are 3 Debugging methods
- Debugging by Induction
 - By starting with the symptoms of the error in the result of one or more test cases and looking for relationships among the symptoms
- Debugging by Deduction
 - Is a process of proceeding from general theories or premises to arrive at a conclusion
- Debugging by backtracking
 - For small programs the method of backtracking is more effective to locate errors.
 - To use this method start at the place in the program where an incorrect result was produced and go backwards in the program one step at a time.
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