

Assignment 8

- Title: Dos commands.

- Problem Statement:

Write x86 menu driven ALP to implement OS (Dos) commands. TYPE, COPY, DELETE using the operations on files. User is supposed to provide command line arguments in all cases.

- Objective:

- 1) To implement Dos Commands using file operations
- 2) To work with Arguments given on command line in ALP.

- Outcome:

- 1) Implement DOS commands using file operations
- 2) Handle the command line arguments in ALP.

- Requirements

- 1) 64 bit processor & OS.
- 2) NASM
- 3) Editor, linker loader, debugger, etc.

- Theory:

- 1) TYPE Command:

This command should display the contents of file specified by user on command line, on the terminal.

./exe-name TYPE file-name.txt

- 2) COPY command:

This command should copy the contents of one file to another file (both the files being specified by user on command line)

./exe-name file1-name.txt file2-name.txt

- 3) DELETE command:

This command should delete the file specified on the command line. The command given by user will be of following format

./exe-name DELETE file-name.txt

* Algorithm:

- 1) Pop the stack 3 times into rsi.
- 2) Compare [rsi] with
 - 'T' goto ⑤ if equal
 - 'C' goto ⑥ if equal
 - 'D' goto ⑦ if equal
- 3) 5) — Pop stack into rsi
 - move frame, [rsi]
 - Open file
 - Read to buffer
 - Display buffer
 - Close
- 6) — Pop stack into rsi
 - move frame, [rsi]
 - Pop stack to rsi
 - move frame1, [rsi]
 - Open files
 - Read first file to buffer
 - Write buffer to second file
 - Close files
- 7) — Pop stack to rsi
 - Move frame, [rsi]
 - Delete file
- 8) Exit.

• Test Cases:

	Input	Expected output	Actual output
1)	TYPE file.txt	<contents displayed>	Yes
2)	COPY file1.txt file2.txt	<content copied>	Yes
3)	DELETE file.txt	<File deleted>	Yes

• Conclusion:-

DOS Commands TYPE, COPY, DELETE are implemented using command line arguments.