

1995 Paper 10 Question 9

Unix Case Study

Describe the segments that compose a Unix process and how the `exec` functions create these segments from the sections of an executable binary file. [8 marks]

Using as an example the command line `ls | wc`, describe the sequence of operations and system calls that a shell must perform to execute the commands to the point at which an `exec` function is invoked on each of `ls` and `wc`. [12 marks]