1997 Paper 10 Question 12

Unix Case Study

Explain how the buffer-cache is used by the Unix file system.   [10 marks]

Indicate why this approach might cause problems for applications which are concerned with the management of persistent data.   [1 mark]

Give examples of when a process needs to *sleep* while accessing the buffer-cache and in each case indicate the event that causes the corresponding *wakeup* to be executed.   [6 marks]

Explain the interaction of wakeup and scheduling.   [3 marks]