CSS-430 : Operating Systems : HW06-Questions

**Assignment Text**

Complete the following problems from the OSC book, 10th edition:

* Problem 6.1
* Problem 6.2
* Problem 6.3
* Problem 6.5

6.1

Question: In Section 6.4, we mentioned that disabling interrupts frequently can affect the system’s clock. Explain why this can occur and how such effects can be minimized.

6.2

Question: What is the meaning of the term busy waiting? What other kinds of waiting are there in an operating system? Can busy waiting be avoided altogether? Explain your answer.

6.3

Question: Explain why spinlocks are not appropriate for single-processor systems yet are often used in multiprocessor systems.

6.5

Question: Illustrate how a binary semaphore can be used to implement mutual exclusion among n processes.