Review 6

Quiz Review

List two things that would be part of a process table entry (PTE) but not a thread table entry.

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Address space
Open files
Child processes
Signals & handlers
Accounting info
Global variables

Quiz Review

What is the difference between mechanism and policy?

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Policy The rules a particular mechanism should follow (i.e., the parameters of an algorithm)

Mechanism The way something is done (e.g., an algorithm)

Quiz Review

List an advantage and a disadvantage of both a Microkernel and a Monolithic Kernel architecture.

Quiz Review

Under Shortest Job First, if the following jobs (with indicated processing times) arrived at time zero, what would be the Average Turnaround Time and the Throughput? Show your work.

A (10)	B (5)	C (20)	D (1)	E (4)

Turn Around Time	Throughput
D 1 = 1	D 1
E 4 + 1 = 5	E 4
B 5 + 4 + 1 = 10	B 5
A 10 + 5 + 4 + 1 = 20	A 10
C 20 + 10 + 5 + 4 + 1 = 40	C 20
(1 + 5 + 10 + 20 + 40)/5 = 76/5	5/(1 + 4 + 5 + 10 + 20) = 5/40

Synchronization

Strict Alternation

Disable Interrupts

Semaphores

Conditional Variable

Peterson's Solution

Race Conditions

Mutex(1) Semaphore(1)
NumberOfReaders = 0 NumberOfWriters =0

```
Reader {
    Sem.down

    If ()
    sem.up
    Mutex.down()
    Read()
    Mutex.Up()

}
```

```
Writer {

    Mutex.down()
    Write()
    Mutex.up()

}
```