Quiz2

Due No due date **Points** 2 **Questions** 13
Available May 11 at 9:25am - May 11 at 9:50am 25 minutes **Time Limit** 25 Minutes

This quiz was locked May 11 at 9:50am.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	12 minutes	1.05 out of 2

Score for this quiz: **1.05** out of 2
Submitted Mar 9 at 1:28pm
This attempt took 12 minutes.

Question 1 — 0 / 0.1 pts

An alternative approach to multi-threading for concurrency is called thread -driven programming, which uses asynchronous I/O.

Answer 1:

ou Answered: thread

orrect Answer: event

orrect Answer: events

Question 2 — 0.2 / 0.2 pts

After being put in the ready list, a thread may be in four states that include, **in alphabetic order**, finished , ready , running , waiting . Please use alphabet order for the first letter on all answers.

Answer 1:

Correct!

Finished

Answer 2:

Correct!

Ready

Answer 3:

Correct!

Running

Answer 4:

Correct!

Waiting

Question 3

0 / 0.15 pts

Which of the following is NOT a step performed by UNIX exec?

ou Answered

- (●) initialize the hardware context to start execution at "start".

orrect Answer

- ( ) create a child process
- ( ) load the program prog into the current address space
- ( ) copy arguments into memory in the address space.

Question 4

0.1 / 0.1 pts

Almost all widely used operating systems take a similar approach to the architecture of the kernel where most of the OS functionalities run inside the kernel.

Correct!

- (●) True
- ( ) False

Question 5

0.15 / 0.15 pts

Which of the following functions is called for the main thread to wait for the termination of a child thread?

- ( ) thread_exit
- ( ) thread_block
- ( ) thread_wait

Correct!

- (●) thread_join

Question 6

0.15 / 0.15 pts

Involuntary kernel thread context switch follows three steps of what order?

1. Run the kernel's handler
2. Restore the state
3. Save the state

- ( ) 2, 3, 1

1, 2, 3

1, 3, 2

Correct!

3, 1, 2

Question 7

0.1 / 0.1 pts

The earliest implementations of Java Virtual Machine (JVM) implements a green thread, which is a pure user-level implementation.

Correct!

True

False

Question 8

0 / 0.15 pts

Which of the following is not a possible option for Multi-thread Process Implementation?

orrect Answer

Single-threaded processes

User-level threads without kernel support

Using kernel threads

ou Answered

User-level threads with kernel support

Question 9

0.1 / 0.1 pts

Unix fork returns only in the main thread.

- True
- False

Correct!

Question 10

0 / 0.4 pts

Please fill the following blanks in the code (note that { is used for substitution of [due to the confusion with Canvas problem setting):

```
static void go(int n);

static thread_t threads{10};


int main() {
    // create threads
    for(int i=0;i<10;++i)
        NTHREADS (&threads{i}, char argc ,
int arg );


    // wait for thread termination
    for(int i=0;i<10;++i)
        thread_join ( int arg );

}
void go(int n) {
    thread_exit(100+n);
}
```

}

Answer 1:

ou Answered NTHREADS

orrect Answer thread_create

Answer 2:

ou Answered char argc

orrect Answer &go

Answer 3:

ou Answered int arg

orrect Answer i

Answer 4:

ou Answered int arg

orrect Answer threads[i]

Question 11

0 / 0.15 pts

Which of the following is correct for condition variable "wait" function?

- wait(lock)

orrect Answer

- wait(&lock)

ou Answered

- wait()

wait(*lock)

Question 12

0.15 / 0.15 pts

Which statement is correct for Hoare's Semantics on condition variable implementation?

Correct!

- if(condition) then wait
- while(!condition) then wait
- if(!condition) then wait
- while(condition) then wait

Question 13

0.1 / 0.1 pts

Code based on semaphores is not uncommon, especially in operating systems.

Correct!

- True
- False

Quiz Score: **1.05** out of 2