# Quiz2

**Due** No due date **Points** 1.6 **Questions** 10
**Available** Oct 2 at 2pm - Oct 2 at 2:30pm 30 minutes **Time Limit** None

This quiz was locked Oct 2 at 2:30pm.

## Attempt History

| | Attempt | Time | Score |
|---|---|---|---|
| **LATEST** | Attempt 1 | 19 minutes | 1.2 out of 1.6 |

Score for this quiz: **1.2** out of 1.6
Submitted Oct 2 at 2:20pm
This attempt took 19 minutes.

### Question 1 — 0.1 / 0.1 pts

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

**Answer 1:**

**Correct!** 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

**0.15 / 0.15 pts**

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

- load the program prog into the current address space
- Correct! create a child process
- copy arguments into memory in the address space.
- initialize the hardware context to start execution at "start".

## 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_wait
- thread_join

Correct!

- thread_block
- thread_exit

## Question 6

**0 / 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

- 1, 3, 2
- 1, 2, 3

ou Answered

- 3, 1, 2

orrect Answer

- 2, 3, 1

## 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
- ( ) Using kernel threads

ou Answered

- (•) User-level threads without kernel support
- ( ) User-level threads with kernel support

## Question 9

0 / 0.1 pts

Unix fork returns only in the main thread.

ou Answered

- (•) True

orrect Answer

- ( ) False

## Question 10

**0.4 / 0.4 pts**

Please fill the following blanks in the code:

```
static void go(int n);
static thread_t threads{10};

int main() {
    // create threads
    for(int i=0;i<10;++i)
        thread_create (&threads{i}, &go ,
i );

    // wait for thread termination
    for(int i=0;i<10;++i)
        thread_join ( threads[i] );
}
void go(int n) {
    thread_exit(100+n);
}

}
```

**Answer 1:**

Correct!

thread_create

**Answer 2:**

Correct!

&go