cuLearn

Started on	Wednesday, 26 September 2018, 4:38 PM
State	Finished
Completed on	Wednesday, 26 September 2018, 5:23 PM
Time taken	45 mins 4 secs
Marks	7.00/9.00
Grade	**77.78** out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

What is the best definition for the "volatile" in the C programming language:

Select one:

- a. A data type that the compiler interprets as allocating a variable in the heap so that the variable can change in size as well as contents; not a variable in the data segment whose size is fixed.
- b. A component in the computer system that is liable to change rapidly and unpredictably and must be monitored in real-time.
- c. A modifier for a data type that signifies that the variable is a read port register whose contents may change due to hardware events, not a memory cell whose contents always stay the same until the program writes a new value. ✓

Your answer is correct.

The correct answer is: A modifier for a data type that signifies that the variable is a read port register whose contents may change due to hardware events, not a memory cell whose contents always stay the same until the program writes a new value.

Question 2

Correct

Mark 1.00 out of 1.00

uint_32_t is

Select one:

- a. A typedef data type ✓
- b. A reserved data type

Your answer is correct.

The correct answer is: A typedef data type

Question 3

Complete

Not graded

What is the full path name of the included header file called **stdint.h** ?

Answer: C:\Keil_v5\ARM

C:\Keil_v5\ARM [~~\ARMCC\include\stdint.h~~]

The correct answer is:
c:\Keil_v5\ARMCC\include

Question 4

Incorrect

Mark 0.00 out of 1.00

The watchdog timer is an advanced topic that we won't cover until later in the course, yet you will see that it is disables at the beginning of every program that we will use or write.

Read the **Technical Reference Manual** (posted on CULearn or online) to select the best definition of a watchdog timer

A watchdog timer :

Select one:

- a. Must be reset regularly by the computer to signal that the computer is operating properly
- b. Must be set regularly the by the debugger to enable watches (user inspection) of the program's variables
- c. Must be read regularly by the program to ensure that it is not stuck running in an infinite loop ✗

Your answer is incorrect.

The correct answer is: Must be reset regularly by the computer to signal that the computer is operating properly

Question 5

Incorrect

Mark 0.00 out of 1.00

(Answer is in the Technical Reference Manual)

What is the name of the functional module that is responsible for the watchdog configuration?

Answer: WDT_A ✗

[~~WDT_A~~]

The correct answer is:
SYSCTL

Question 6

Correct

Mark 1.00 out of 1.00

(Answer is in Technical Reference Manual)

Within the WDT control register (WDTCTL), which bit is called WDTHOLD?

Select one:

- a. 6
- b. 7 ✓
- c. 8

Your answer is correct.

The correct answer is: 7

Question 7

Correct

Mark 1.00 out of 1.00

(Answer is in Technical Reference Manual)

What is the DRA (Direct Register Access) name of the register used to configure the watchdog timer?

Answer: WDTCTL ✓

WDTCTL

The correct answer is:
WDTCTL

Question 8

Correct

Mark 1.00 out of 1.00

The two forms shown below for a for-loop are equivalent (They will execute identically)

```
for (i=0; i<1000; i++);
i = -1;
```

versus

```
for (i=0; i<1000; i++) { }
i = -1;
```

Select one:

- True ✓
- False

You'll look like a pro if you use the trailing ; but beware and know the consequences!!

The correct answer is 'True'.

Question 9

Correct

Mark 1.00 out of 1.00

In our sample code, the loop's counter *i* is initialised to 10000. What is the maximum possible value (giving the longest possible delay) to which *i* could be iniitalised?

Select one:

- a. 255
- b. 65535
- c. **2,147,483,647** ✓
- d. 9,223,372,036,854,775,807

Your answer is correct.

i is declared as uint32_t - an unsigned 32-bit number

The correct answer is: **2,147,483,647**

Question 10

Correct

Mark 1.00 out of 1.00

The two forms shown below for a for-loop are equivalent (They will execute identically)

```
for (i=0; i<1000; i++);
i = -1;
```

versus

```
for (i=0; i<1000; i++)
i = -1;
```

Select one:

- True
- False ✓

You'll look like a pro if you use the trailing ; but beware and know the consequences!!

The correct answer is 'False'.