❖ Problem Set 7:

Consider the following code:

```
typedef struct grades {
    char name[64];
    unsigned long id;
    float scores[11];
} grades;

grades g[60]; // grades for class

float *sp = &g[7].scores[3];
```

Structures in Memory

1/1 point (graded)

Suppose the g array is stored in memory starting at address 0×00002000. Assume an unsigned long is 4 bytes. What is the value of sp? Express your answer in hexadecimal starting with 0x

0×00002360   ✔

Submit   You have used 1 of 2 attempts   Save   Show answer
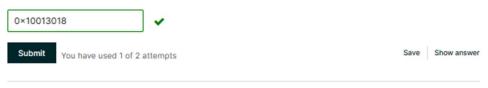
Complete the snippet of C code below set the UART peripheral to a target baud rate of 250 KHz given a TileLink bus clock (tlclk) frequency of 16 MHz. Write the appropriate memory-mapped register (div) with a pointer named UART0_DIV using the code below. Consult the FE310-g002 manual to determine the values of A and B.

```
volatile unit32_t *UART0_DIV = (uint32_t*)A;

*UART0_DIV |= B;
```

Peripheral Address

1/1 point (graded)

What is A? Express your answer in hexadecimal starting with 0x.

0×10013018   ✔

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Peripheral Write Value

1/1 point (graded)

What is B? Express your answer in decimal.
Remember that the divisor in the table is div + 1.

63   ✔

63

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